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ART. I.—*Remarks on the radical cure of Spina Bifida, or Hydrorachitis, with an account of a new operation proposed by* Prof. PAUL DUBOIS. Translated from the French of EDWARD LABORIE, D. M. P., for the Western Journal of Medicine and Surgery, by N. BOZEMAN, Jr., M. D., of Louisville, Ky. (From the *Annales de la Chirurgie:* vol. 14, 1845.)

Spina Bifida, or Hydrorachitis, is regarded in a great majority of cases, even when the skin is not ulcerated, as a cause of non-viability, although instances are on record of individuals thus affected who survived a long time. It is well known, indeed, that the rupture of the tumor, which sometimes takes place in the midst of the amniotic fluid, may in certain cases be deferred to a much later period. Thus children affected with spina bifida have lived to the sixteenth and seventeenth years; and one individual has even reached the fifty-fifth year.

These facts are certainly encouraging, and when the dis-

ease is not connected with a bad cerebral conformation, it is not surprising that attempts should be made to obtain a radical cure. Many processes have been devised for this purpose, and some modes of treatment successfully instituted both in France and England have justified such experiments on the part of modern surgery.

It has already been stated, that the tumor sometimes bursts during intra-uterine existence; and that then the life of the infant may not only be preserved, but even the development of all the organs continue without appearing to suffer any detriment. Therefore, if we can operate under similar circumstances, that is to say, avoiding the contact of air with the interior of the emptied sac, it would be proper to attempt the radical cure. But unfortunately, even in attending to these precautions, there are other obstacles which render the operation almost always fatal. These obstacles may be divided into two classes: in one may be arranged those which have their source in the nature of the tumor; in the other, those which relate to the organization of the infant affected with hydro-rachitis.

As to this last class very little need be said. Surgeons who have had an opportunity of examining infants that have died with this malformation, know how frequent it is to find it connected with a greater or less degree of hydrocephalus, although often the existence of the latter disease had not been suspected during life. This circumstance occurred in the infant which forms the subject of this article.

The first category will demand our special attention. It will be seen how rare are the circumstances which warrant an operation. I shall endeavor to show, in the first place, that it can be practiced only in very few cases; and then, after having taken a glance at the different methods proposed, shall point out the indications which are to be followed in making a choice of these methods. I shall in the first place relate the case which I noticed in the service of Dubois, while acting as his clinical clerk; and aftewards point out the ingenious operation proposed by that learned professor, as well as the

the modification which he proposes to make should he have occasion to perform another operation.

Case. Feb. 5th, 1845, a woman, 23 years of age, entered the obstetrical clinic. She was well formed, had always enjoyed good health, and had already given birth to one child, which was born at the full term without any malformation. She herself was the offspring of well-formed healthy parents. Menstruation began at the age of sixteen, and has ever since recurred with perfect regularity, the discharge being small in quantity and never continuing longer than three days. About the end of April, 1844, the menses were suppressed, and a short time afterwards she experienced symptoms of pregnancy. Gestation passed through all its stages without any phenomena worthy of notice, save that the woman experienced some vertigo and nausea, and was subject to profound melancholy. The morning after her admission, at 4 o'clock, the first pains of labor commenced, at 7½ o'clock the membranes gave way, and a quarter before 8 o'clock parturition was completed, having lasted three hours and three quarters. The head presented and delivery was effected by the natural powers. In due time the after-birth came away favorably; and the woman was able to leave the hospital the ninth day.

The infant, a female, weighed about nine and a half pounds; the body was well proportioned, and of the normal size. The limbs were well developed, and possessed their full power of motion. Nothing, in a word, could have led one to suspect in this infant an affection so serious. The different diameters of the head were likewise perfectly natural.

On the posterior aspect of the body, in the sacro-lumbar region, was observed a tumor fifty-four millimetres in the vertical diameter at its base, and from thirty-two to thirty-five in the transverse. It was somewhat oval in shape, and formed at the most prominent point a projection of fourteen millimetres. The skin which covered the tumor exhibited a deep red color, increasing in intensity and becoming purple towards the center; it had none of the characters of well formed skin but seemed, according to the expression of Dubois, to want the

epidermis. On touching it, it was easy to distinguish in the interior of the swelling a small quantity of fluid. Pressure applied equally upon every portion of it, reduced it somewhat, without causing any appreciable symptoms of compression; a circumstance which was owing, as M. Dubois likewise remarked, to the small amount of fluid. Pinching the sac produced severe pain, as was manifested by the cries of the infant. The lower extremities, as is natural in new born children, were flexed upon the abdomen; but they were readily made to quit this position by tickliug the soles of the feet. On pressing the center of the tumor, it was easy to pass the finger down upon the spinal column into the opening made by the deficiency of the spinous processes. The diagnosis was easy; it was evidently a case of spina bifida, of the sacro-lumbar region. As to the composition of the tumor and the situation of the fluid, it was not easy to form a correct opinion, yet it appeared almost certain that the collection was in the arachnoid cavity.

The Professor in speaking of the imperfection of the skin over the tumor, said that this arrest of development was possibly belonging to the same cause which had given rise to the imperfection in the internal parts. I will remark here, in order to complete the description, that there existed in the superior part of the tumor two points from which there was a transudation of serous fluid, and in the inferior part a single point where the same phenomenon occurred. These were evidently the beginnings of ulceration.

Dubois, to prevent ulceration of the skin, the day after birth made a puncture in the tumor with a long narrow tenotome. The instrument was introduced about two inches distant from the sac, and its withdrawal was followed by the escape of a larger quantity of fluid than might have been supposed from the size of the swelling. The infant appeared to experience some pain upon the introduction of the instrument. When the operation was concluded, Dubois, to strengthen the skin, ordered the application of a strong solution of acetate of lead, and afterwards very moderate compression. The following

day the skin was modified in character, the little openings which had given vent to the fluid were closed, the redness was less intense, and the volume still diminished. The same treatment continued.

The sixth day a new puncture was made with a similar result. The skin had almost completely lost its abnormal color. The infant had taken the breast well ever since birth. Treatment the same: compression being applied a little more firmly. After this second puncture, the fluid was reproduced more rapidly: the third day it was necessary to operate again; then the third day after; and finally, the fifth time, two days after the last. This loss of serous fluid debilitated the infant very much; and although it was nourished well, and presented neither symptoms of paralysis nor convulsions, yet it was evident that death was imminent. It was now as a last resort that Dubois devised a new method of operating.

The tumor was diminished a little in its transverse diameter, and the skin over it improved almost in its entire extent. The professor having ascertained that the walls of the tumor could be approximated at the base, had made for this purpose two small plates of iron, each of them eight centimetres in length and ten millimetres in breadth, concave on one surface and convex on the other, and pierced by a number of holes. Each extremity terminated in a small head, supported upon a narrow neck.

On the 22d of February, after making a new puncture Dubois proceeded as follows: Directing an assistant to grasp the tumor transversely and bring the parietes as closely as possible together, he applied the small metallic plates—their convexities presenting inwards—one upon each side of the tumor longitudinally, and close upon its base. Afterwards, the plates being maintained in their position by the assistant, he secured them to each other by means of a cord drawn around their contracted extremities. In this manner the base of the tumor was effectually compressed, and its walls held in contact. To facilitate the development of the adhesive process, the tumor was transfixed near the base by two needles

passing through the holes in the plates. The child seemed to suffer very much when the constriction was effected. In the evening Dubois found it very ill, with the inferior extremities firmly flexed upon the abdomen; the instrument was immediately removed. The morning of the 25th the infant died.

On examination, the deficiency was found to exist in the last three lumbar vertebræ and the upper part of the sacrum. The arachnoid membrane, through the whole extent of the spine, had suffered violent inflammation; a purulent effusion occupied its cavity, and existed also beneath its visceral surface; the meninges of the brain were very much injected; but what attracted most attention was the enormous dilatation of the lateral ventricles which contained about half a glass of sero-purulent fluid, holding in suspension some albuminous flakes. As to the spinal cord, that portion corresponding to the cleft had issued frem its canal, and was found attached to the external wall of the tumor. It could not be traced further than this point, as it was lost in a shapeless and purulent mass, which emitted a strong gangrenous odor. Neither could the origin of the sacral nerves be distinguished except where they passed through the sacral foramina. Upon elevating the tegumentary wall of the tumor, the cord remained so firmly attached to the skin, that it was drawn out entire, having been previously detached from the canal. As to the other parts of the child, no alteration could be discovered. All the viscera, both in the thoracic and abdominal cavities, were in a normal condition.

This case offers us a well marked example of the difficulties which necessarily occur in attempting the radical cure. Dubois operated in this case as a last resort. It was obvious that the feebleness of the infant was increasing, and the serous loss could no longer be borne. I shall, when speaking of the different operations, describe the modification which the professor has suggested of his own proceeding; though in the first place I will examine to what extent it is allowed to have recourse to an operation. I may add that a short time before recording the preceding observation I had

the opportunity of examining, through the kindness of M. Paul Dubois, another case of dorsal hydrorachitis, in an infant which was born at full term, and which died almost immediately after birth. The description which I have given of the tumor in the first case will apply equally well to the second, even to its situation. The skin offered the same imperfection, and the spinal cord was attached to the external wall of the tumor and in a similar manner, so that few of the many operations devised at the present time could have failed to injure the cord and thus cause a fatal result.

Of the causes which contraindicate an operation. I have already stated that it was needless to consume time with a description of those causes which relate to a bad conformation of the infant: it is evident enough that all operations must be avoided. I shall confine myself to an examination of those which relate more particularly to the character of the tumor itself.

1. *Form of the tumor.* The form of the tumor is valuable in a diagnostic as well as therapeutical point of view. Whenever the tumor is attached to the vertebral column by a broad base without presenting a very great projection, there is reason to apprehend that the spinal cord is displaced, and adherent to the external wall of the tumor. This condition will be still more probable when the tumor presents a great vertical diameter. In these cases, indeed, it must be admitted that the number of spinous processes deficient is greater, and consequently hernia of the cord more apt to take place. On the contrary if the tumor is pedunculated, the chances of success in the treatment are very different: it may then be hoped that the cord has not escaped through the small aperture, and this presumption amounts almost to a certainty if the tumor, attached to the vertebral column by a small peduncle, presents notwithstanding a considerable volume. Ruysch found in a fœtus a malformation which may serve as a type of this kind of pedunculated hydro-rachitis: a single lumbar vertebra pierced with a hole scarcely large enough to admit a pea:

through this opening a probe was easily introduced into the vertebral canal, both upwards and downwards. The tumor was formed by the extension of the meningeal envelopes of the spinal cord.* These are also the characters presented by the tumors which consist of a serous cyst exterior to the dura mater, and I must state here that I completely coincide with the view taken by Velpeau, who maintains that to this variety must be referred the greater part if not all of the cases that have been successfully treated.

2d. *Aspect of the tumor.* The aspect of the skin covering the tumor is a matter which merits the most serious, but has received very little attention. Very frequently, indeed. the arrest of developement which takes place in the vertebral column is not limited to that part, but the skin itself remains incomplete over the tumor. At its circumference the integument abruptly loses the normal characters: it does not present a uniform aspect, nor a tint analogous to that in other parts of the body: it is villous, rough, purple, and resembles at first sight a mucous structure. Besides these singular characters there are many little fistulous orifices constantly discharging a serous fluid. These openings do not communicate directly with the interior of the sac, and even some force is required to penetrate them with a very fine probe; the fluid escapes as it were by transudation. At a later period they inflame and ulcerate. and thus the interior of the sac is exposed to the external air. In these cases the contra-indication is evident; an operation must be avoided. In three individuals affected with spina bifida, and presenting these conditions, I found hernia of the spinal cord, with adhesion of it to the tegumentary wall of the tumor.

Dubois in his interesting lectures on spinal bifida directed particular attention to this imperfection of the skin, which, he observed, he had frequently met with. We may notice here

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* See the article Spina Bifida in the Traite des Maladies Chirurgicales of Boyer.

a very remarkable fact that has a bearing on the treatment of these cases, viz: that it is possible to modify the imperfection of the skin, to complete the development which nature has left uncompleted. Thus the case which I have reported furnishes a very marked example of this. There existed two small openings at the superior and another at the depending part of the tumor. M. Dubois, by applying a strong solution of acetate of lead, produced a complete obliteration of these fistulæ, and in a few days the tumor lost almost entirely the abnormal appearance we have described The skin presented somewhat the appearance of a cicatrix, and when M. Dubois concluded to operate the transformation was almost complete.

3d. *Sensibility of the tumor.* This exists in different degrees. Pressure almost always gives rise to a general uneasiness; a fact which admits of easy explanation. It is well known, indeed, that if the serous fluid in the arachnoid cavity is pressed towards the nervous centres, compression is produced. This symptom is valuable as it shows that the fluid is situated within the membranes and not in an isolated cyst as in the cases pointed out by Velpeau, in which pressure produced no signs of compression. Sometimes the sensibility seems to be limited to the points where the pressure is made with the finger at the very centre of the tumor. This symptom is of great value, as it may, in connection with another character which I shall mention when I come to speak of the consistence of the tumor, indicate almost certainly the attachment of the spinal cord to the integuments. In these cases pressure instead of inducing a state of general depression, sometimes causes convulsive contractions of the inferior extremities. Finally, whenever great sensibility to moderate pressure exists in all parts of the tumor, there is reason to suspect the existence of local inflammation, and consequently any operation must be deferred until this symptom is removed by proper treatment.

4th. *Mobility of the Tumor.* If the tumor can be moved easily in every direction without causing pain, the indication

is favorable. On the contrary, if by such movement pain is induced, the indication is unfavorable, and much caution should be employed in undertaking an operation.

5th. *Consistence of the Tumor.* Fluctuation is known to be a very striking character in hydro-rachitis, and the kind of fluctuation may assist in making out the prognosis. If the tumor is formed only by serous fluid, without the spinal cord entering into its composition, the sensation imparted by the fluctuation will be the same at all points; the reaction of the fluid being felt every where through walls of the same thickness. But, if there is hernia of the cord, and the latter has formed an attachment to the walls, the fluctuation opposite the point of attachment will be less marked. Finally, if the contents of the tumor be drawn off, by pinching up the external wall, now become flaccid, the thickness could be appreciated; moreover, it would then be easy to recognize the characters already pointed out, when speaking of sensibility as a symptom. The instrument used in making the puncture might, likewise, serve to determine the situation of the cord, for if the point should encounter that organ, violent pain would be produced. To recapitulate: If I may be allowed in the present state of the science to mark out the circumstances indicating and contra-indicating an operation, they may be classed as follows:

Operation indicated.

1st. If the infant is in other respects well formed, and the tumor single.

2d. If the tumor is pedunculated.

3d. If the skin covering the tumor is well developed, with no inflammation or ulceration, and if the tumor is observed to be uniformly translucent.

Operation contra-indicated.

1st. When the infant presents some other defect as hydrocephalus, umbilical hernia, paralysis with deformity of the limbs, double tumor, &c. &c.

2d. When the tumor presents a large base, especially in the vertical direction.

3d. When the skin which

4th. If pressure upon all parts of the tumor causes little or no pain.

5th. If moving the tumor is unattended with pain.

6th. If the tumor fluctuates distinctly, and the fluctuation is felt equally at all points.

covers the tumor is imperfectly formed, and ulcerated.

4th. When there is great sensibility to pressure, and more especially to pressure on the most projecting point of the tumor.

5th. When no movements of the tumor can be made without causing pain.

6th. When the fluctuation is not uniform, and is felt less distinctly at the summit of the tumor.

In conclusion of this subject, I will observe, that the favorable symptoms pointed out are only valuable when all or nearly all of them are present; while on the other hand the existence of one unfavorable symptom is sufficient to contraindicate an operation.

In examining the different modes of treatment proposed, I omit the simple palliative treatment, although it is that which must necessarily be most commonly employed; but I remove from this class the treatment which consists in methodical compression of the tumor, it being in fact founded upon a particular view of the nature of the affection under consideration. Some surgeons have regarded the tumor which exists in hydro-rachitis as the obstacle to the original union of the vertebræ; supposing that what occurs in this case is analogous to what occurs in congenital-umbilical hernia. According to them, the hernia of the meninges is the cause of the spina-bifida, and consequently they would treat hydro-rachitis as an ordinary hernia.

This view of the subject, which is certainly not new, had met with but little favor when it was adopted and re-established by Astley Cooper. An infant a month old and well formed, presenting a round and transparent tumor of the size of a

large walnut, was the first subject upon which he employed this method of treatment in all its simplicity. This was in June 1804.* In May 1811, the cure was complete. The compression was at first made with a roller, afterwards with a bandage very similar to that used in cases of umbilical hernia. This is, however, the only case in which he was successful.

In 1809 a new case having come under his observation, the method of treatment employed was more complex. The compression was applied in conjunction with punctures made in the tumor by means of a needle. Compression was kept up and new punctures made for the space of a year; the patient recovered, the cure being radical in the fullest acceptation of the word. The spina-bifida here was also simple.

In 1810 another example was offered to the illustrious surgeon, but in this case, there was ulceration of the skin; nevertheless the same treatment, pointed out in the preceding case, was practiced; compression with only a single puncture was employed. At the end of forty days the infant died quite unexpectedly, as recovery a short time before was looked upon as certain.

The same year Cooper employed his proceeding once more. He does not give any details as to the nature of the tumor; he only indicates its seat. In this case thirty punctures were made, and the child, after having been given over for lost, recovered. The radical cure was effected in eighteen months.

This system of treatment, therefore, embodies two distinct methods. The first method, which was successful once in arresting the progress of the affection, seemed afterwards insufficient. Cooper then added puncture of the tumor to effect a complete cure. This constitutes the second method; and two patients out of three recovered. This result may be consider-

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*Memoir on Spina-bifida inserted in the complete surgical works of Astley Cooper, translated by MM. Chassaignac and Richelot. Paris, 1837: p. 611.

ed very satisfactory, and I shall by and by discuss the value of the proceeding.

Before the time of Astley Cooper the tumor had been attacked by surgical instruments. Hoffman was the first to propose making small punctures to bring about adhesive inflammation, afterwards Richeter and Desault employed the seton: Desault wished by this means to obtain, first, the gradual discharge of the fluid, then adhesive inflammation of the tumor. Ligation of the tumor has been proposed, and afterwards its excision. All these means have generally been followed by the same results. Nevertheless Hamilton practiced excision and the operation succeeded. However, the infant died seven months after, and upon post mortem inspection it was found that the sac removed comprised all the membranes as far as the parietal layer of the arachnoid inclusive. In making this examination a remarkable circumstance was noticed: on a level with the division of the vertebræ. there was formed a new fibrous membrane which closed up the spinal canal.

It will be seen that there are many things to be considered in all these processes, and that they include nearly all the principles of the operations recently proposed. Such is the processes of Dubourg who elevates rapidly the whole tumor, and then makes a section of it. This surgeon has succeeded twice. Tavignot likewise elevates the tumor, but to prevent more certainly the introduction of air he first seizes the base of the tumor with forceps, somewhat analogous to the enterotôme, then excises all on the outside of the blades. In this proceeding is found the principle of serous agglutination The researches of Jobert, indeed, find here a happy application.

Benard has admitted this principle in its fullest extent. He approximates the serous surfaces at the base of the tumor by pinching together firmly the tegumentary walls in a vertical direction, and afterwards maintains them in contact by means of two quills placed one upon each side of the tumor longitudinally, as the iron plates in Dubois' process which is an advantageous modification of the one we are describing. The

quills are kept in their place by passing a cord through them lengthwise, and afterwards tying its two ends together.

The processes of Benard and Dubois are certainly ingenious, but they present great difficulty in their application. It is, indeed, almost impossible to prevent the apparatus, first applied to the base of the tumor, from slipping when the ends of the cord are tied; and then a new tumor is formd below, not so large, to be sure, as the original, yet constituting a relapse quite as serious. It was with the view to obviate this difficulty that Dubois was led to modify his apparatus. The two plates for this purpose are the same as those previously described, only that they are not quite so broad, and do not present so many openings in the longitudinal direction. The operation is begun by transfixing the tumor with two, three, or four needles, according to its size; taking care to introduce them quite at the base of the tumor on one side, and to bring them all out at an opposite point. The two plates are then applied below the extremities of the needles, and approximated by means of threads acting on the extremities and drawn with equal force. The plates thus applied cannot slip from the base of the tumor, retained as they are by the needles previously introduced. When by this process or the preceding one a union is effected at the point where the serous surfaces are in contact, the portion of the tumor projecting beyond the apparatus is cut away, as it is reduced to a simple cyst without any connection between it and the spinal canal.

I have pointed out nearly all that surgery has done in combatting this affection, there remaining only a few modifications of minor importance. Among these different proceedings it is impossible at the present time to make an absolute choice; but there are certain indications sufficiently precise, which may be summed up in a few words.

For this purpose I shall arrange under the following heads all the proposed methods of operating:

1st. Compression by means of a hernia bandage:

2d. Compression with punctures either direct or by the sub-cutaneous method:

3d. Seton, whatever may be the object proposed in its application:

4th. Incision and excision with suture:

5th. Agglutination of the serous surfaces at the base of the tumor. Ligature of the tumor in mass may be added to this class of treatment:

6th. Same proceeding with the addition of the previous introduction of needles to facilitate the application of the instrument, and to render more prompt and efficacious the adhesive inflammation.

The excision of the sac, after having succeeded in closing the tumor at its base by means of the fifth and sixth processes, may be performed without difficulty, as I have already pointed out.

In the most simple cases, those which present all the favorable conditions, I should not hesitate to give preference to the process of Professor Dubois. But spina bifida rarely exists with symptoms so favorable; most frequently there is one or more of the characters assigned as contra-indicating an operation. Ought the patient in these cases to be abandoned? Certainly not, since it is under these circumstances that the method of Astley Cooper will be found applicable, employing either simple compression or compression in conjunction with subcutaneous punctures. The two cases successfully treated by the English surgeon are very encouraging, and I should gladly revive his proceeding if an occasion present itself.

But when pressure upon the tumor cannot be borne, there is reason to suspect that hernia of the cord exists. In those cases, is it warrantable to attempt anything to save the patient? If it be evident that displacement has taken place, then an operation must be avoided, and the most simple palliative treatment employed; adding thereto punctures practiced with the greatest caution for fear of injuring the medullary cord.

If there is doubt as to the existence of hernia, incision might be tried before having recourse to any one of the proceedings

of Dubourg, Dubois, Benard, and Tavignot. The incision should be cautiously made, and carried towards the lateral and superior part of the tumor in order more certainly to avoid the cord. In this operation, to prevent entirely the introduction of air, I propose to imitate what takes place when the tumor is ruptured in the midst of the amniotic fluid. I have observed, indeed, that under these circumstances ulceration of the skin was entirely harmless, not interrupting in the least the development of the infant. Therefore to practice incision the infant may be immersed in a tepid bath, and if upon exploration of the tumor it be found that the spinal cord is in its proper canal, the proceeding of Dubois may immediately be employed. If on the contrary hernia exists, the edges of the incision should be brought together, and simple dressing with very moderate compression employed.

It is almost needless to say that I entirely reject the seton, and also the processes of Hamilton and Dubourg.

I here terminate this appreciation, having deduced as logically as possible the reasons governing a choice when called upon to treat an infant affected with hydro-rachitis. The final appeal must be to practice, which, better than all reasonings, will be the means of making a valid solution of this interesting question.

ART. II—*Notes of a Case of Lithotomy.* By WM. H. GARDNER, M. D., of Munfordsville, Ky.

Jesse S. Pedigo, aged ten and a half years, came under my care May 17th, 1848, with symptoms of gravel, from which he has suffered since early infancy. Sounding indicated the presence of a stone, and after a few days preparation, he was placed upon the table for operation May 25th, in the presence of Dr. Jett, Dr. Dye, Mr. Walton, Mr. Jones and several

other gentlemen. Chloroform was administered and the staff introduced during its exhibition. He was soon brought under its influence and the lateral operation performed in the usual manner, and the stone extracted without difficulty or the least consciousness on the part of the patient. The stone was an oxalate of lime, or mulberry calculus of a flat oval shape, about one inch in its greatest diameter, and weighing two drachms. The patient was under the influence of the chloroform about 8 or 10 minutes, from which he recoved in a very short time after being placed in bed. He was questioned by the medical gentlemen present in relation to his sensibility during the operation, but expressed himself as being wholly unconscious of anything whatever that had taken place, and asked several times if the stone had been taken out. He complained of no pain whatever after the operation, except a slight smarting of the wound from the urine passing, nor was there any shock to the system as is usual after severe operations. The following is the subsequent history of the case, which presents a point or two of interest.

Evening same day.—A little excitement; pulse 100—skin moist—urine flows freely by the wound and through the catheter introduced for that purpose.

26th. Rested well last night; pulse 80; free from pain; no fever; appetite good; quite cheerful; water flows by the wound. Evening. Slight excitement; pulse 90; no evacuation from the bowels since the operation; is resting well to night.

27th. No fever this morning; pulse 85; appetite good; diet, bread and milk. Evening. No evacuation. Administered an enema of warm water which passed off without any fecal discharge; urine to-day by the natural course in small quantity

28th. Rested well last night; no fever; bowels acted well to-day.

29th. Still improving; bowels acted again to-day; urine by the urethra and the wound.

30th. Still doing well; wound healing; patient cheerful.

31st. Still improving—bowels acted again this morning without medicine.

June 1st. Complained last night of pain in the left side, in the region of the spleen; is suddenly much worse; had a chill this morning about daylight; thirst; fever; furred tongue; quick pulse. Night. Hot fever all day; headache; much thirst; no appetite; pulse 110 and weak. Prescription—cream tartar in water freely—blister to the left side.

2d. Fever not so high; thirst continues; pulse 100 and weak; skin dry and hot; no tenderness over the bladder. ℞. Calomel 10 grs. Ipecac. 2 grs.

3d. A chill this morning again at daylight, followed by high fever; thirst; pulse 100—medicine acted well last night. Prescription—syrup of Ipecac and spirits nitre every 2 hours. Night. Pulse the same; fever high; urine all by the wound; wound looks well.

4th. Some better this morning; washed and dressed the wound; warm water enema; pulse 92; no appetite; took a little nourishment; blister drying up. Night. Has had hot fever all day; abated a little at 9 P. M. ℞. Quinine 12 grs., opium 4 grs., ipecac 4 grs., make into pills; three every three hours.

5th. In a free perspiration this morning; no chill or fever; sweat nearly all day; pulse 80 and good.

6th. Dull and drowsey; light fever; disposed to become cool on getting up; some appetite; pulse 80 and feeble; bowels acted twice by enema; wound looks well.

7th. Still weak and dull; slight fever; 2 grs. quinine at 7 and at 11; more fever in the evning.

8th. Feeble and weak to-day and a little feverish.

9th. Rested well last night; no fever; appetite good; urine began passing by the urethra again; wound healing finely; patent gaining strength.

10th. Wound closed; urine all by the natural channel.

12th. Still improving.

13th. Still doing well; wound healed; patient up and about the room.

14th. Had a chill this morning; fever all day.

15th. Still feverish; prescription 2 grs. quinine every four hours from 12 o'clock to-day till 6 to-morrow.

16th. Sweating; fever abated. Evening. Had a chill; high fever all night.

17th. Took quinine and sweated freely; fever in the evening after.

18th. Severe vomiting and diarrhœa last night; bowels still acting to-day; took quinine and opium combined.

19th. Bowels continue too active; took quinine and opium up to 4 o'clock to-day—anodyne enema—after which the bowels became quiet; free perspiration since last night; but fever rose high this evening.

20th. High fever all night and all day to-day; dull and stupid; sponged the body with cold water; bowels acted three times to-day; pulse 100 and good; tongue furred; dry hacking cough.

21st. Fever continues as yesterday.

22d. But little alteration; fever unabated.

23d. Fever has abated somewhat; wound opened last night after being closed 12 days; opening the size of a good quill; urine flows freely that way; cough bad last night, dry and hacking; complains of no pain; mind wanders; talks much at random when asleep, but rational when aroused; general appearance much more unfavorable.

24th. Fever all day; cough continues; dull and drowsy; mind wanders.

25th. Fever has abated; skin become moist in the early part of last night. Prescription: quinine 3 grs. every four hours till three doses are taken; bowels acted twice to-day; evacuations natural.

26th. Better—sweating freely to-day; no fever; appetite good; urine all by the opening in the perineum.

27th. Patient decidedly better.

28th. Still improving.

29th. Opening in the perineum closed; urine all by the natural course; appetite good; gaining strength.

July 1st. Patient recovered.

In relation to the use of chloroform in the above case, I am fully satisfied of two important advantages, whilst no unpleasant effect whatever resulted. 1. All resistance on the part of the patient being obviated, the performance of the operation was much facilitated. 2. There was absolutely no shock to the system as is usual after all severe operations. His recovery up to the eighth day was as rapid as in any case I ever witnessed, and had it not been for the unfortunate attack of fever at that time, with the subsequent relapse, he would have been but a few days longer confined to his bed.

July, 1848.

ART. III.—*A case of Bronchitis in a Child, alternating with Dysentery, Prolapsus ani treated successfully with Sulphate of Iron.* By DAVID W. YANDELL, M. D., of Louisville, Ky.

I was called, on the evening of the 7th of September last, to see Maria S.——, a robust, vigorous little girl, aged two years and a half, who had been laboring for some days under a very distressing catarrh which had affected especially the larger bronchial tubes. I found her with hurried, wheezing, and embarrassed respiration, a frequent, loose, diffused, and deep cough, occurring in paroxysms, and followed by expectoration of a pale, glairy, transparent and watery fluid; her pulse free, full, developed and soft, beating 120; her countenance pale and slightly bloated, her skin dry and hot, her tongue coated in the centre; red at the edges and tip.

Auscultation could not be practiced because of her fretfulness, but I could distinctly hear while holding my ear several inches from her chest, both the sonorous and sibilant ronchi, proceeding from the antero-superior part of the thorax; the former much more distinct after a fit of coughing, and both inaudible when a considerable interval elapsed between the paroxysms.

I ordered her to be placed in a warm bath; to take three

grains of calomel and one of ipecac., and use, in doses of a teaspoonful at short intervals, till she fell asleep, the following:

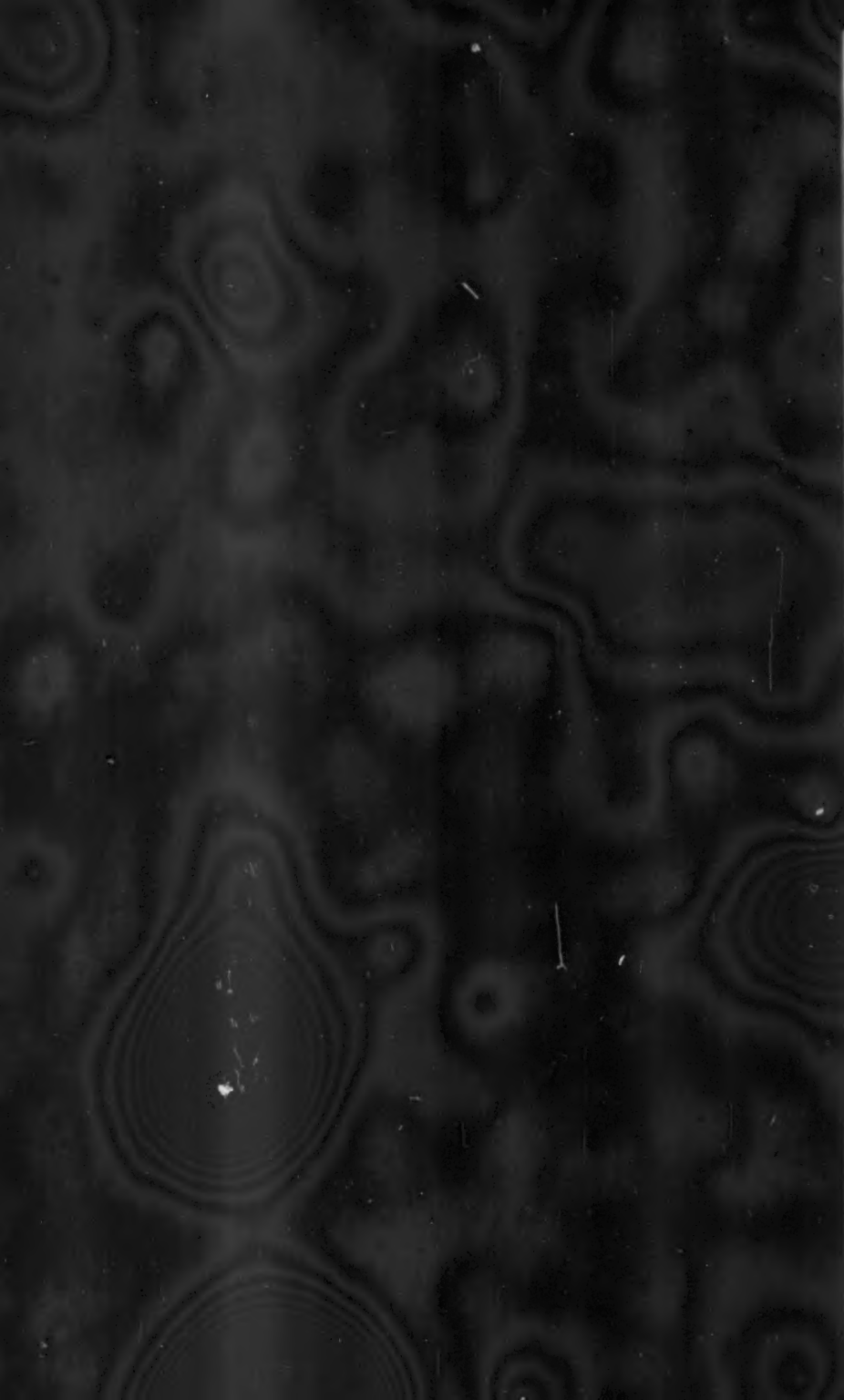
℞. Infus. senegæ, ℥iv.
Syrup. ipecac., ℥j.
Oxymel. scill., ℥iij.
Ant. et potass. tartrat., gr. j.

I further ordered that cloths wrung out of hot water and renewed whenever they grew cold, should be applied to the chest, to be followed, when she seemed disposed to sleep, by a flannel jacket.

The next morning I learned that she had passed a restless night, was twice called up to stool, and found her in almost the same condition as I had last seen her. The warm bath was ordered to be twice repeated, the cloths kept constantly applied, the mixture continued, her system kept under the influence of ipecac., till night, when a small portion of calomel and Dover's powder was to be administered.

The medicine had brought away several copious and dark colored stools, before my visit of the next morning, at which time her pulse was 90, respiration almost natural, the ronchi no longer perceptible, her cough not so frequent and more diffused, the expectoration opaque, tinged with yellow and less viscid, her tongue clean, skin and general expression natural. The mixture was continued during the day, and at night five grains of hydrarg. cum. creta, combined with a few drops of denarcotized laudanum, were administered.

She continued to improve for the next two days, when I ceased visiting her. Two days after this time I was called to her again and found her suffering from dysentery of a very violent form. Her pulse was quick and small; tongue furred, thirst greatly increased; the urine was high colored, voided frequently and with difficulty; the skin harsh, hot and dry, especially over the abdomen, which, however, was neither tense nor tender; the straining was severe, the calls to stool frequent and the discharges offensive and streaked with blood. During the intervals between the stools no pain was com-



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plained of. Pressure over the region of the cœcum and sigmoid flexure of the colon occasioned no uneasiness.

I ordered a warm bath, and a dose of castor oil, to be assisted by an injection of almond oil, to which were added a few drops of laudanum; the abdomen to be swathed in flannel, cloths wrung out of warm water applied to the perineum, and, at night, a bolus composed of calomel, ipecac. and hyosciamus.

During the next twelve hours every symptom of dysentery, save the tenesmus, had entirely disappeared, while all the symptoms of bronchitis had returned. The latter disease was soon subdued by recourse to the treatment which was so successful in the first attack, and the tenesmus was greatly abated by cooling, opiate, and emollient injections used in very small quantities and frequently repeated. The amelioration of the bronchitic symptoms was scarcely apparent, before those of dysentery were redeveloped with greater intensity than before, again to subside under the use of opium, ipecac., calomel and oil, and the injection and local means which I have enumerated, when bronchitis again arose, continued for forty-eight hours, disappeared, and was seen no more. The dysentery, from this time till its cure, was accompanied by no other symptom than the tenesmus, which, at first very distressing, gradually became less and less frequent, and entirely ceased upon the application of the extract of belladonna around the region of the anus.

Charmed with the speedy efficacy of the belladonna, I recommended it to my class on the same evening, and had scarcely done so when I was called to my little patient to find considerable prolapsus of the rectum, which had occurred in a very natural and easy stool that she had just passed. The gut was easily returned, and I contented myself with prescribing an electuary of sulphur, confection of senna, and simple syrup, directing the mother to gently return the bowel whenever it descended. Learning at my visit next morning, that the prolapsus continued, although the stools were soluble and passed without difficulty, I resorted to injections of an aqueous

solution of the sulphate of iron, each injection containing about the eighth of a grain of the iron. Although this treatment was persisted in for three days, the quantity of the iron being daily augmented, no perceptible good resulted. I now used the iron in another manner and combination with the most happy effect, the prolapsus diminishing perceptibly after the first operation of the medicine, and entirely disappearing in the course of two days. The prescription was the following:

℞. Pulv. rhei, ℈ijss.
Ferri sulphat, gr. xxx.
Saponis albi, ℈j.
Aq. distil. q. s.

Ut ft. mass. in pil. xx. divid. One of these pills to be taken every night at bed time.

Louisville, Nov. 24th, 1848.

REVIEWS.

ART. IV.—*An Inquiry into the Degree of Certainty in Medicine; and into the Nature and Extent of its Power over Disease.* By Elisha Bartlett, M. D., Professor of the Theory and Practice of Medicine in Transylvania University; Member of the American Academy of Arts and Sciences, etc. etc. Philadelphia: Lea and Blanchard. 1848.

The complaint of Dr. Bartlett, that the former confidence in medicine "has within the last few years been violently shaken and disturbed," and that "a wide-spread skepticism as to its power of curing disease" prevails in its place, is precisely the complaint of Cabanis, writing on the same subject, more than half a century ago. "Not long ago," says that eloquent writer, "it was the fashion at Paris to ridicule medicine, and treat its powers as chimerical. The apes of literary men, vain of appearing like them above superstition, fancied themselves bound to retail in society the arguments of Montaigue, the jests of Molière, and the vagaries of Rousseau. Day after day these very persons who denied a Providence and a plan in creation, would argue that the cure of diseases was due entirely to provident and wise nature." The evil, therefore, is not a new one under the sun, but one of which the professors of the healing art have had cause to complain in every age of medicine. Of no class of errors is it more true than of those infesting our profession, that they walk in a cycle and reappear at intervals. In all past time, medicine has been subject to just such assaults as those which in our day have shaken public confidence in its truth and efficiency; and in

all time to come, there is reason to believe, these incursions will be renewed. They are annoying, but experience teaches that they are not fatal. Against the shield of truth opposed by our science the pestilent arrows "hurtless fall," and it comes forth more radiant and mighty for the trials to which it has been exposed.

We have already expressed our high opinion of the services rendered to his profession by Professor Bartlett in the work the title of which has just been given, and we propose, on the present occasion, to present an outline of his admirable argument.

He begins by referring to the exact knowledge attained in anatomy and physiology, but in as much as it is not against these departments of our science that the charge of uncertainty has been brought, he does not dwell long upon this part of his subject, but proceeds to "show the nature of our knowledge of diseases—its extent, and its degree of positiveness." This he does by evidence and illustrations derived from the examination of pneumonia—"a disease of frequent occurrence, not confined to any particular localities, susceptible of being clearly marked in its characteristic features, and sufficiently severe, more or less seriously to endanger life," and therefore a fair subject for the illustration of his inquiry.

His first inquiry relates to the local lesion peculiar to pneumonia, and, as all medical men are aware, he is able to show that our knowledge respecting it is definite and satisfactory. So also is our knowledge of the symptoms and physical signs of the disease. By the aid of the latter, we can ascertain the precise portion of the lung involved, mark its boundaries, follow the inflammation as it advances, and "in its retrograde march towards health." And by the symptoms we are also able to appreciate with much accuracy the danger of the malady. But the main question relates to our control over it by our remedial means. What does that amount to? Bloodletting has been regarded almost universally as the main remedy in the early periods of the disease. What is its value? Dr. Bartlett answers the question in the following passage:

"Between the years 1821 and 1827, Louis studied carefully, and from day to day, at La Charité, the effects of blood-letting in fifty cases of pneumonia, terminating favorably, and in twenty-eight cases which terminated in death. The patients were bled from one to four times, according to the indications in each case; from ten to fifteen ounces of blood being taken at each operation. Of the fifty cases terminating in health, twenty-three were bled, for the first time, within the first four days from the commencement of the disease, and the average duration of the disease in these cases was seventeen days; twenty-seven were bled for the first time, between the fifth and the ninth days, inclusive, and the average duration of the disease in these cases, was twenty days. Every possible precaution was taken, that the two groups of cases, thus compared with each other, should be essentially alike in all the circumstances that could, in any way, affect the danger of the disease. Louis studied, further, the effects of the same remedy upon the leading symptoms of pneumonia. He found that the pain in the side was never wholly, and at once, removed by an early blood-letting; but, that on the contrary, it was generally more severe, for twelve or twenty-four hours after the first bleeding, if this was practiced early in the disease. He found, however, that the average duration of the pain in the first group of cases, was six days, and a little over eight days in the second group. He found that most of the other symptoms were moderately influenced by the bleedings. Between the years 1830 and 1833, Louis studied in the same manner, at La Pitié, the effects of blood-letting in twenty-nine cases of pneumonia, four of which terminated fatally. Of the twenty-five cases terminating favorably, thirteen were bled between the second and fourth days of the disease, inclusive; and the average duration of these cases was fifteen days and a half; the other twelve cases were bled from the fifth to the fourteenth day, inclusive, and their average duration was eighteen days and a quarter. No one of these cases was bled on the first day of the disease. The first bleedings were a little more copious than in the cases at La Charité. The effects of the remedy upon the individual symptoms did not differ from those in the latter cases.

"So far as this limited investigation could settle the question, Louis considered himself justified in coming to this conclusion,—that blood-letting has a favorable effect upon the march of pneumonia; that it abridges its duration; but that this effect is much less than had generally been supposed, patients who

are bled during the first four days of the disease, all other things being equal, recovering four or five days sooner than those who are bled later. And as far as this particular investigation is concerned, the conclusion is perfectly justifiable and legitimate. It results with a slight qualification, necessarily and inevitably. from the facts; and Louis never pretended to carry the conclusion beyond this. He says, expressly, that these facts are neither sufficiently numerous, nor sufficiently various, finally to settle the question at issue; and that he publishes them principally for the purpose of calling anew the attention of observers to the subject. It is important to bear in mind that these investigations show directly, not so much the absolute effects of blood-letting, as the difference in its effects when performed early, or late, in the disease. His conclusions, so far as his own facts are concerned, would have been more truly stated, if he had confined it to early, compared with late, blood-letting.

"In 1836, Dr. James Jackson, of Boston, published a detailed analysis of thirty-four cases of pneumonia, received into the Massachusetts General Hospital between the years 1825 and 1835, for the purpose of showing, according to the accurate and positive method adopted by Louis, the effects of treatment upon the disease. Without following him through all the steps of his analysis, it is enough for me to say, that his conclusions in regard to blood-letting correspond essentially with those of Louis, with some difference in favor of the former The average duration of the disease in those who were bled for the first time on or before the fourth day, was about twelve days; the average duration in those bled after the fourth day, was thirteen and a quarter; and in five cases which were not bled, except locally in one, the average duration was fourteen days and a half, nearly. The latter cases were also the mildest. I will only add, that Dr. Jackson is disposed to attribute the shorter duration of his cases, when compared with those of Louis, in a considerable degree at least, to the warmer temperature of the rooms in which they were placed, and to the better general care which they received. Dr. Jackson also found the effects of early blood-letting upon the pulse, the pain, and the character of the sputa, somewhat more marked and immediate than Louis."

If we would know exactly the effects of our remedies, we must compare groups of cases treated by them, with others left to themselves, or treated by other remedies. But such

comparisons are not likely to be made on an extensive scale, for the reason that, owing to the strong conviction that it is curable by art, the disease is seldom left to the unaided powers of nature. Nevertheless, they are not entirely wanting.

"During the year 1840, Grisolle treated eleven patients attacked with pneumonia, with out using any active remedies. The patients were mostly young, one only having reached the age of fifty-six years; and all the cases were sufficiently mild to justify M. Grisolle, as he thought, in leaving them without any active treatment. They were confined to bed, on a light diet, had some pectoral drinks, and, in a few instances, a simple laxative, like castor-oil. In nine cases, the inflammation had reached its seconed stage when the patients entered the hospital; in two, it was still in its first stage, and did not pass into the second. The cases all terminated favorably, but it is very important to remark, that, considering the limited extent of the inflammation, and the general mildness of their character, the prominent symptoms of the disease persisted for an unusually long period of time. The brick-dust, tenacious expectoration preserved its character, on an average, till the ninth and nearly till the tenth day of the disease; the pain in the side did not wholly cease in any case before the seventh day, and in several it continued till the twentieth, twenty-fifth, and twenty-seventh, its mean duration being fifteen days; and in some of these cases, it was only removed, at last, by scarified cups or blisters. The general fever, which was in no case high, usually continued till towards the tenth day; while the physical signs did not begin to diminish before the close of the second week, four or five days after the cessation of the fever, and they did not wholly cease, until from the twenty-second to the thirtieth day. Fixing the time of convalescence, at one or two days after the subsidence of the fever, this occurred from the eleventh to the twelfth day.

I shall now compare with the foregoing results those in a corresponding group of thirteen cases, actively treated. As in the first group, the patients were young, and the inflammation not extensive, so that they might safely enough, have been left to themselves. In nine cases, the inflammation had reached its second stage; in four, it was still in its first, when the treatment was commenced. The patients were bled, generally or locally, once or twice, from the first to the sixth day of the disease, on an average, near the fourth day. The sputa lost their pneumonic character, on the sixth day of the

disease, about forty-eight hours after the blood-letting; the pain in the side, which was very acute in several cases, was invariably mitigated by the general or the local bleeding, and ceased entirely from the second to the twelfth day, the average day being the eighth; the general fever had wholly subsided at the end of the first week, and twenty-four hours later convalescence was fully established, finally, the physical signs began to diminish with the cessation of the fever, that is, on the seventh day; and in ten patients, whose chests were carefully examined at the time of their discharge, this average period being the twelfth day, the lungs had entirely recovered their permeability.

M. Grisolle has studied and analyzed, according to this same rigorous method of Louis, and his exact school, still other groups of cases, under different conditions and circumstances. The results of this study and analysis, I shall very briefly state. The first group consisted of fifty casss, in which, when received into the hospital, the inflammation was still entirely in its first stage. Sixteen of the patients were females; more than four-fifths had at least an average strength and vigor of constitution, the others were thin, delicate, and with systems more or less deteriorated; the ages of the patients varied from sixteen to seventy-two years, the average being forty years. The treatment was commenced from the first to the tenth day of the disease; in a majority of cases between the third and the fourth. In fourteen patients the disease was light; in the remaining thirty-six, the symptoms were sufficiently grave to render the issue of the cases more or less doubtful. All the patients were bled from one to five times, according to the indications, and circumstances of each particular case,—the gravity and period of the disease, the age and constitution of the patient, and so on. The average quantity of blood taken was not far from three pints. Five of the cases terminated fatally. In more than two-thirds of the cases, the inflammation passed from the first to the second stage; in the others, this did not happen. This partial arrest, in the customary march of the inflammation, could not be attributed to any greater activity of treatment, since these patients were bled much less freely than the others; it depended apparently upon the lightness of the disease. The mean period of convalescence was towards the tenth day.

"The second group consisted of one hundred and eighty-two cases, in which the inflammation, in whole or in part, had already reched its second stage, when the treatment was commenced. Thirty-nine of the patients were females; nearly

three quarters had constitutions of average vigor; all the rest were delicate and feeble. The ages of the patients varied from sixteen to seventy-seven years, the average being thirty-five. The disease was more or less grave in all cases; in twelve, both lungs were involved. The treatment was commenced from the first to the eighth day of the disease, the average period being four days and a quarter from the beginning of the disease. The number of bleedings varied from one to six; and the quantity of blood taken, from eight ounces to four quarts. Thirty-two of the cases terminated fatally more than one-sixth. Of the one hundred and fifty patients who were cured, blood-letting was the only active remedy in sixty-nine; in the other eighty-one, antimonials were made use of. These cases will be more particularly spoken of by and by. The larger mortality in this group, than in the preceding one, is sufficiently accounted for by the more advanced stage of the disease, and by the somewhat later period when the treatment was commenced. Of the one hundred and one cases, treated principally by blood-letting, and terminating in recovery, in one-seventh where the inflammation was still in its first stage when the treatment was begun, and in one-twelfth, where the inflammation had reached its second stage, the first bleeding was immediately followed by a decided amelioration of some of the rational symptoms; this amelioration being accompanied, in only one third of the cases, with any appreciable change in the physical signs. This prompt and decided effect usually occurred under the two following circumstances, to wit:—first, when the inflammation was limited to a small portion of the lungs, and the general symptoms were in no degree violent or grave; second, when the blood-letting was practiced at a somewhat advanced period of the disease, when probably in its natural progress, it was tending to diminish. When blood-letting was several times repeated in the same case, each operation was generally followed by a more or less marked improvement, in one or more of the symptoms. In no case was the disease wholly arrested. The pain in the side wholly disappeared immediately, or soon after, the first blood-letting, in about one-twentieth only of the cases; in nine-tenths, it was more or les diminished, and it usually yielded more rapidly to local, than to general bleeding. Its mean duration was seven days. The influence of the treatment upon the character of the sputa was less marked, and the same thing is true of the physical signs. In two-thirds of the cases, the first blood-letting was followed by a diminution, more or less considerable, of the rapidity of the pulse. When

the first bleeding was practiced in the course of the first four days of the disease, the pulse began to become slower between the fifth and the sixth day, and fell to its natural standard by the eleventh; when on the contrary, the first bleeding was not practiced till after the fourth day, the pulse did not begin to diminish in frequency till towards the ninth day, and did not reach its natural standard till near the thirteenth.

"I have now done with the subject of blood-letting in the treatment of pneumonia; and what are the results of the investigation through which we have gone? Is it proved, or is it not proved, that this remedy has a favorable influence over the disease? Most certainly there can be but one answer to these questions. The accredited and settled belief which has prevailed ever since the age of Hippocrates in the efficacy of blood-letting in the treatment of pneumonia, is not an error and a delusion; it has its foundation in nature and in truth. And this efficacy is no longer a matter of belief merely, resting on the basis, broad enough certainly, but not always to be trusted, of what is called general experience. It is sustained by positive proof,—by all the proof and the only proof, of which, in the nature of things, it is susceptible. It has the sanction of clear, intelligible, philosophical demonstration. It can neither be denied nor doubted, except as the reality of the material universe, or the truth of the Newtonian system, may be doubted or denied by some eccentric or crotchety dreamer, who cannot or will not see phenomena and their relations as they show themselves to the eyes of all other men. Louis has demonstrated that the circumstance of a few days' difference in the time of practicing blood-letting, makes not merely a trifling and unimportant, but a very considerable difference in the duration of the disease, and a corresponding difference in the duration of its leading symptoms. Grisolle has demonstrated, in the same manner, that mild and slight cases of the disease, although they would recover without any active remedies, have all their prominent symptoms very greatly mitigated in severity and shortened in duration by blood-letting. These cases do not absolutely prove that the remedy saves life, because in these cases life is saved without it; but they do prove the favorable action and effect of the remedy,—all that they are capable of proving, in the nature of the case. I ought to add here, that these positive results of Louis' and Grisolle's researches stand entirely uncontradicted by any adequate counter testimony. They are supported and corroberated on every hand—compassed about with a great cloud of witnesses—but there is no authentic and reliable observation which throws upon them the shadow of doubt. The

cases of Dr. Fleischmann, treated on the homœopathic system, and cited by Dr. Forbes, are utterly without value in their bearing on this question. No one circumstance affecting the danger of the disease is given, so that the most essential elements of the problem which they are made use of to solve, are wholly omitted. Besides this, the table of Dr. Fleischmann contains other internal evidence that no reliance is to be placed upon it. One hundred and five cases of peritonitis are given, with only five deaths. What does this mean? Does anybody believe that this number of cases of this disease occurred in a small hospital in the course of eight years, and that only five of them terminated fatally?

It is now positively ascertained, that the statistics of Fleischmann were spurious—made up to suit the exigencies of the case. Certainly, they are utterly without value in their bearing on this or any other medical question.

Dr. Bartlett goes on to inquire into the value of the other great remedy in the treatment of pneumonia—tartar emetic. He quotes again the observations of Grisolle.

M. Grisolle arranges the cases, in which he studied the action of antimony, in three groups or series. The first of these consisted of forty-four cases, observed at the Hotel Dieu, during the years 1839 and 1840, in which no active remedy was made use of excepting antimony. Thirty-six of the patients were males, and eight females. Their ages varied from 15 to 71 years, the average being thirty-seven. Nine had vigorous constitutions; fifteen had constitutions of medium strength; and the remainder, nearly one-half, were thin and delicate. In thirty-five cases, the inflammation had entirely passed into the second stage, when the special treatment was commenced; in the other nine, the inflammation was, at least for the most part, still in its first stage. The disease was generally grave; in no case was it mild; in more than three-quarters of the cases at least the half of one lung was involved. In all the patients the disease was sufficiently severe, at the commencement of the treatment, to render its issue more or less doubtful. The treatment was begun from the second to the ninth day of the disease, the mean period being the fourth day. Six grains of emetic tartar was the quantity usually given, in the twenty-four hours, in five ounces of a sweetened vegetable infusion. Sometimes only four grains were given,

and the quantity was never carried higher than twelve. If the effects of the remedy on the stomach and bowels during the first day were violent, on the subsequent days, a small quantity of an opiated syrup was given at short intervals. This treatment was kept up from one to four days, the average period being about three and a half days. Most of the patients took, in the whole, about twenty grains; in no instance did the quantity exceed sixty grains. Vomiting and purging were present in every case, at least for the first day or two, the latter generally predominating. Of thirty-six patients to whom the antimony was given for several days, there were seventeen in whom the vomiting and purging wholly ceased after the third or fourth day. Of the forty-four cases, six terminated fatally, a little less than one-seventh. The mean age of these patients was over fifty years, and the treatment was not commenced till after the fifth day. The following were the apparent effects of the remedy upon the principal symptoms of the disease. The pain in the side, even when it was excessively severe and acute, was generally greatly relieved, or altogether removed. Of thirty-four patients in whom the pain was present when the treatment was commenced, twenty-three were considerably relieved from the first day; in five the pain which was excessively acute, was entirely removed. In five other cases, the pain did not begin to diminish till after the second day; in three it became more violent, and persisted till local bleeding was resorted to. One of the most constant and striking effects of the remedy consisted in the diminution in the force and frequency of the pulse. In twenty-seven patients, of the thirty-eight who recovered, the pulse on the second day had diminished to the extent of from ten to forty in the minute; in six the diminution did not take place till the third day; in four not till the fourth; and in one the rapidity of the pulse continued during a considerable part of the period of convalescence. The diminution in the frequency of the respirations was less striking and uniform. As a general rule, the improvement was most marked in cases where the breathing was most accelerated. The viscid brick-dust expectoration lost its pneumonic character and became yellowish or colorless, in most cases within from one to two or three days. With a single exception, in which the physical signs continued to increase for four days after the use of the antimony was begun, these signs either remained stationary, or began to diminish from the first day. Thus, in eighteen cases, signs of resolution were manifest at the close of the first day; in eleven, at the close of the

second; in two, at the close of the third; and in five, at the end of the fourth. Still the stethoscopic phenomena were never entirely removed in this short period of time; some traces of them remained, in most cases at the time when the patients left the hospital. The heat of the skin, the headache, the thirst, and the general restlessness diminished or ceased with the same promptitude. Another very striking and very constant result of this treatment was seen in the rapidity of convalescence, and in the small impairment of the muscular strength. The mean duration of the disease was ten days. In more than half of the patients who died, the use of the antimony was followed by a temporary mitigation in the severity of the disease.

"The second group consisted of eighty cases in which the administration of antimonials was precluded by one or more bleedings, general and local, these not having produced any very decided effects upon the progress or the principal symptoms of the disease. The bleeding in all these cases might have been repeated; it was not contra-indicated by the state of the patient; but instead of this, antimony was resorted to. The ages of the patients varied from sixteen to seventy years, the average being thirty-five and a half. The disease was grave in all; in five-sixths, the inflammation occupied at least a half of one lung; in eight cases, it extended to both; in the remaining one-sixth, the disease, though less severe, could not be regarded as mild. In every case, the inflammation had reached, if not in whole at least in part, its second stage, when the antimonial treatment was commenced, which was generally from the sixth to the seventh day of the disease. Seventy of these patients recovered, and ten died. Of the first, the pulse fell to the extent of from ten thirty beats in the minute, immediately after the first daily potion, in thirty-seven; in only five, was the diminution deferred till after the third daily potion. In more than half the cases, the second day of the treatment brought with it a marked amelioration of the heat of the skin, the pain in the side, the color of the sputa, the difficulty of breathing and the physical signs. A very decided amendment took place in two-thirds of the cases during the first two days of the treatment. The remaining details of these cases it is not necessary to give.

"Finally, in a third series were arranged thirty cases which had been abundantly bled, and in which the disease had, notwithstanding, continued to make constant progress; the state of the pulse and the general condition of the patients were such as to render any further loss of blood entirely out of the

question; the danger in every case was extreme, and antimonials were given as the only and last resort. Half the cases were desperate, when this treatment was commenced. Eighteen of them terminated fatally, and in more than half of these, death took place within two days after the commencement of the antimonial treatment. In nine cases, where life was in imminent peril, there was so decided an amendment after the first, second, or third daily potion, that the patients might be looked upon as almost out of danger."

From the testimony adduced, then, it is clear, that many cases of pneumonia terminate in health without any active medical treatment; that other cases again will terminate fatally, despite all our remedies; and that there is still a third class, intermediate between the two foregoing classes, "not terminating naturally in recovery, nor inevitably in death." In these latter cases, medical treatment determines the issue—when judiciously applied, not only lessening the severity of the disease, and shortening its duration, but turning the "trembling balance in the sufferer's favor."

Our knowledge of many diseases is less than our knowledge of pneumonia, but as respects the most common, "the difference is only in degree." Not so our power of curing them. In their relation to this subject, Dr. B. divides diseases into several groups. The first terminate spontaneously in health. Diarrhœa, jaundice and catarrh in their common, simple forms, belong to this family. In the second group, embracing functional dyspepsia, chorea, and chlorosis, the tendency to health is not so decided, though if their causes are removed, they, too, will generally yield to the recuperative powers of nature. The power of our art over one is most striking—chlorosis.

"When entirely simple, not complicated with any other pathological element, it is almost always absolutely under the control of remedies. The physician orders his corroborating chalybeates, and a nutritious animal diet, with the fullest and most undoubting reliance on their efficacy. He expects them, almost as a matter of course, to renovate and enrich the impoverished and watery blood, to bring back the faded color of

the cheeks and lips, to infuse fresh strength and vigor through the debilitated frame; and he is very rarely disappointed. This disease, as I have already said, does not tend directly to destroy life, and it is accompanied with very little positive suffering; but it has no natural tendency, like many other diseases to go through certain regular stages, and then to cease spontaneously,—it is not self-limited; it is a source of much annoyance and discomfort; it unfits one more or less for the active duties of life; it sometimes lays the foundation for other and more serious diseases, and if our science and art had done nothing else than to ascertain the effects of iron upon this malady, they would have given a gift to humanity that ought at least to shield them from the blind and bitter assaults of arrogant ignorance and wooden-headed stupidity."

In the third group are sporadic dysentery, simple acute rheumatism, acute pleurisy, tonsillitis, catarrhal croup, &c.—diseases of a grave character, but not ordinarily fatal. Some of these, as croup and dysentery, are very much, and others, as tonsillitis and rheumatism, are very little, under the control of medicine.

"The fourth group is a very extensive, and a very important one, and more miscellaneous in its character and composition, than any of the preceding. It includes most of the more serious local inflammations, and all the general fevers, continued, periodical, and exanthematous. Hooping-cough, Asiatic cholera, erysipelas, and delirium tremens, may be placed in this class. Most of them are more or less self-limited,—that is to say, they tend to go through a certain series of processes, and then to terminate either in death or in health, and the direction of this tendency depends upon the grade and severity of the disease. Pneumonia belongs to this class and the detailed remarks already made in relation to it, are more or less applicable to the other individuals of the class. I do not mean to say, that the effects of remedies upon these diseases are as great and decided as they are upon pneumonia; this would be an exageration; generally, they are not so; I mean, merely, to say they are of the same character The mild forms of the most of these diseases, and even those of considerable severity, tend, like simple pneumonia in a young, robust person, very strongly towards a favorable termination, and in a great majority of instances, they reach this termination, quite independent of all active remedies. The graver

and more malignant forms of the same diseases, like extensive or double pneumonia in an old person with a deteriorated and feeble constitution, tend as strongly in the opposite direction, towards a fatal termination, which also they generally reach, in defiance of medical art. Simple scarlatina almost always terminates naturally, and spontaneously, in health, without the aid of any active remedies; so does distinct, benign small-pox; so does mild yellow-fever; so do the milder forms of periodical, and of continued fever; while the grave, and malignant varieties of all these diseases, very frequently terminate in death, and are only to a very limited extent, or not at all, under the control of art. Then there is an intermediate set of cases, in which the two antagonist tendencies are nearly balanced, and in which the prevalence of one or the other may often be decided by the judicious interference, or by the entire neglect, of active medical art.

"These diseases differ so widely amongst themselves, in their relation to remedies, that it is difficult to speak of them in general terms. Some of them are more obviously and more uniformly influenced by remedies than others. There is no more doubt, for instance of the favorable effects of blood letting upon inflammation of the pericardium, of the liver, of the kidneys, than there is of these effects on pneumonia. There is no more doubt of the efficacy of wine, in certain stages and conditions of British typhus, than there is of the effects of antimony in pneumonia. Every day, there are multitudes of patients with this disease, as directly and obviously saved from death by active stimulants, as the life of a famishing man is saved by food. And we find here one of the most constant and one of the most important of all therapeutic relations—I mean that between periodical fever and Peruvian bark. The power of opium to allay functional spasm, and to abate neuralgic pain; the antiphlogistic action of antimony, in inflammation of the lungs; the effects of an emetic in catarrhal croup, of iron in chlorosis, of wine in low typhus, are not more invariable and certain, than is the power of cinchona to control and arrest the periodical element, in the great family of malarious fevers. The simple forms of these diseases do, indeed, very commonly subside and cease; they rarely destroy life immediately and directly; but their repeated occurence at length undermines and breaks down the constitution, while in their more violent manifestations, they are as suddenly fatal as yellow fever; and for the prevention of these results, we have one reliable and heroic remedy—cinchona. Somewhat as I said of iron in chlorosis, this gift to humanity is a boon

and a blessing, that ought to secure for medical science and medical art the deep and everlasting gratitude of the world."

The next group, which is the last, embraces hydrophobia, phthisis and diseases, like these, "having no tendency towards a favorable termination, but little or not at all under the control of remedies; and self-limited only by death." Still, even in these art avails to mitigate suffering, and to defer their final period, and there is reason to hope will finally succeed in removing their causes, and so preventing their occurrence.

In an estimate of the powers of medicine it would not be proper to pass over syphilis, a disease so much under the control of remedies, and so hopeless without them. Nor ought child-bearing to be omitted—a natural process, but one oftentimes beset by difficulties which nature is unable to overcome, involving "the certain and unavoidable death both of mother and child"—difficulties which art easily surmounts. "Even in the more favorable, ordinary and natural manner in which the process is accomplished, very great assistance is frequently derived from art, and there is rarely a case in which this assistance may not be of service in lessening the amount of suffering, and in diminishing the chances of danger." Surgery presents claims to public homage and regard which have never been disputed.

Finally; what medicine has done in the way of preventing disease, can any arithmetic sum up its benefactions? It is sufficient to allude to small-pox, once the great scourge of the race, now prevented, or shorn of its danger —"a fitting conclusion to this long and brilliant catalogue of the achievements of medical science and medical art—the richest gift that our science has ever laid on the altar of humanity."

This, we are aware, is but a skeleton of the fine argument of this work—a rough draught, wanting the rich coloring and beautiful drapery of the original; but if enough has been given to induce our readers to inquire further our object will have been fulfilled.

ART. V.—*Practical Observations on certain Diseases of the Chest, and on the principles of Auscultation.* By PEYTON BLAKISTON, M. D., F.R.S.; Fellow of the Royal College of Physicians; Physician of the Birmingham General Hospital; and formerly Fellow of Emmanuel College, Cambridge. Philadelphia: Lea & Blanchard. 8vo. p. 384.

The author of this treatise has had long experience in his profession, and has devoted much attention to the class of diseases of which it treats. In the course of his ample practice he has collected many facts which he supposed would aid in the diagnosis of these diseases, or contribute to their more successful treatment, and these he has embodied in the work before us. Some of his views of treatment differ from those generally received, particularly in regard to the substitution of mercury for venesection in acute inflammations, especially those affecting serous and fibrous membranes, and the employment of tonic in combination with sedative remedies in a large class of chronic disorders. These views, we incline to believe, are gaining upon the profession, and while the lancet is less and less used in the treatment of inflammatory affections, tonics are coming into much more common use in the treatment of chronic complaints.

The first chapter of this work treats of the properties of sound, which is a proper introduction to the study of the sounds afforded by the chest in its various diseases. The sounds elicited by percussion are described in the second chapter, to which the sounds of respiration, and those of the heart succeed. A chapter is devoted to the practice of auscultation which the student will consult with great advantage.

The formation, termination, and causes of thoracic aneurism, are the subjects of the 7th and 8th chapters, and in the 9th and 10th chapters the author gives the diagnosis and treatment of the disease, the snbjects being illustrated with characteristic and instructive cases.

"*Causes.*—Dilitation or perforation of the aorta must arise from a very great increase in the force in which the blood is

impelled into it by the heart, or from a diminution of elasticity and loss of substance of its inner coats. The middle coat, however, is so strong, tough and elastic, that it is impossible to conceive that its permanent dilatation or rupture can be produced by any effort of the heart, so long as the vessel continues in a healthy state. We have seen accordingly that neither excessive hypertrophy of the left ventricle, nor contraction of the aorta at particular points, will produce such effects.

"Diminution of elasticity and loss of substance alone remain, therefore, as the proximate causes of aneurism. These can only result from a morbid alteration of the arterial coats, or a total or partial displacement of their proper substance by matter possessing less of elasticity and cohesion. Alterations of this kind are therefore constantly found resulting from a deposition of horny patches, atheroma, and calcareous concretions.

"*Horny patches.* The inside of the arteries sometimes presents a rugged and uneven appearance, caused by a substance somewhat resembling softened horn, and disposed either in patches or around the whole circumference of the vessel, in some places being opaque, and in others more or less transparent. Andral considers that this appearance is produced by a deposit between the inner and the middle coats; and Mr. Hodgson represents it as resulting from a thickened state of the inner membrane, which he compares to the peritoneum of an old herniary sac. Bizot, however, has shown that it arises from a deposit on the free surface of the inner coat. He has traced the substance deposited passing by insensible degrees from the consistence and transparency of jelly to the opacity and almost the hardness of cartilage, and this in an exact ratio with the age of the subject examined. In three cases in which the patients were suddenly seized and quickly carried off by an acute attack, he found the matter in its softer state and of a rosy color lining a great part of the principle arteries. He has shown that these patches in an early stage of their development, before they have acquired hardness and opacity, may be removed with the inner membrane, which may be thus traced under them. They are often covered by a delicate film, similar to that which has been seen lining aneurismal sacs. Bizot considers this deposit to be a secretion from the inner coat of the artery acted on by inflammation; being in fact, coagulated fibrin, resulting from what Vogel denominates fibrinous dropsy. Patches of a similar kind are sometimes found on the pericardium covering the heart, and on the lining

membrane of the left auricle, in which situation they are generall allowed to be the result of inflammation. Bizot states that they never undergo osseous transformation, as asserted by Morgagni, Haller, Beclard, and Andral. In confirmation of this, it may be remarked that calcareous deposits in the aorta are not true bone, but merely concretions, which havé not been formed from cartilage by cellular development; nor are those horny patches true cartilage. Viewed under the microscope, they are seen to consist of an amorphous mass, more or less transparent, and rendered still more so by acetic acid, which contains some minute granules and some pale cells without nuclei. In some cases no cells can be discovered; in others there is a trace of fusiform cells, showing the tendency towards the formation of areolar tissue.

"Repeated examinations have convinced me of the accuracy of Bizot's researches, and it may therefore, I think, be concluded that these horny patches are imperfectly organized false membranes, deposited on the free surface of the inner coats of arteries.

"The horny patches are not found in all cases of aneurism; when they reach an advanced stage, they cause the destruction of the inner coat of the vessel; but as they do not invade the middle coat, they cannot be considered materially to diminish the elasticity of the artery, or to favor its perforation, unless in conjunction with some other cause.

"*Atheroma* is of a brownish yellow color, and of a consistence varying from that of pus to cheese, or boiled white of eggs. When joined with areolar tissue, it is in certain cases still firmer, and has been then called steatoma; a term, however, which has been occasionally applied to the horny patches by some writers. It originates between the inner and middle coats, and in the substance of the latter. Its changes very much resemble those of tubercle, and consist of softening and of ossification, as it is commonly called. When it softens, it produces ulceration of the middle membrane, followed by rupture or destruction of the inner coat. It not unfrequently thus burrows under the horny plates."

The main element of treatment consists in the diminution of the force of the circulation.

"This may be accomplished by lessening the amount of blood in the circulation, by reducing the heart's action with low diet, sedative and purgative drugs, and mental and bodily

repose. In practising venesection, there are two things to be guarded against. One is the danger pointed out by Dr. Watson and Dr. Hope, which arises from a state of irritability which is so commonly associated with weakness, under the influence of which the heart's action would be occasionally more violent than in the ordinary state of health, as was seen in Dr. Hope's experiments on animals. The other is the danger arising from abstracting large quantities of blood at one bleeding, in the recumbent position, whereby syncope might be induced, from which the heart might not be able to recover, in consequence of the obstacle to the circulation offered by a dilated aneurism of the arch of the aorta full of blood. The same objections lie against an extremely poor diet, and an immoderate use of purgatives, in addition to which such a low state of the system might be induced as would favor the softening of the atheromatous deposit, although in a different manner from that in which such a result is produced in a plethoric state of the body.

"In the choice of sedative drugs the danger of syncope must still be borne in view; and therefore the administration of digitalis requires great caution. I have long abandoned its general use in cases of this kind, having found poppy and hyoscyamus much more safe in their action. The extract of belladonna rubbed over the precordial region has appeared to me to act more beneficially in tranquilizing the heart's action than any other drug."

The author proceeds, in the 11th chapter, to consider the progress and termination of chronic heart diseases, which he divides into two classes—1. those exhibiting no traces of obstruction of the general circulation: 2. those with symptoms of obstruction of the general circulation. The following case is given under the latter head.

"A tradesman's daughter, æt. 15, had a severe attack of rheumatic fever, which left her troubled with dyspnœa and palpitations. Dropsy having come on, and not being speedily relieved, her parents brought her to me for advice.

"The action of the heart was feeble, and the pulse very small. The veins of the neck were swollen, and pulsated slightly. Undulations were seen between the second and third left ribs, and below the nipple. The precordial dullness extended upwards. A strong and rather coarse bellows-

sound was heard below the left nipple, and also near the lower angle of the left scapula, seeming in the latter situation to be close to the ear. Cooing sounds were heard in different parts of the chest. She was relieved and the anasarca disappeared, the veins of the neck remaining rather full. Some months after this the anasarca returned. Seen in consultation with Mr. Pye Chevasse, the dyspnœa was so great as to threaten suffocation, and the legs and abdomen were amazingly distended. The strongest diuretic medicines failed to act on the kidneys, nor was any relief obtained from various remedies. It was proposed to employ acupuncturation on the thighs, but objected to by the parents. In a few days' large bullæ rose on the legs and burst, the sores putting on a black gangrenous aspect. Much serum ran from them; and in a few days more the anasarca had greatly diminished, and the sores on the legs assumed a healthy appearance. The dyspnœa was much relieved, and the kidneys resumed their functions. In a word, the patient gradually recovered her ordinary health, and is now alive; but the physical signs of valvular disease remain the same, and she cannot do any work.

The author makes the following remarks concerning the termination of this case.

"This is indeed a remarkable case. After witnessing it, who would ever despair of a favorable termination in cardiac dropsy? The physical signs of dilitation of the auricle and of mitral regurgitation could not be mistaken. Here, therefore, was a temporary recovery from dropsy, although mitral regurgitation existed and still remains. The immediate cause being recognised, it is therefore possible that this formidable sequella of heart disease may not unfrequently be temporarily arrested, although the indirect causes may be altogether beyond reach."

In regard to the treatment of hypertrophy, the author has the following practical observations.

"When there are evidences of hypertrophy of the ventricles, whether their cavities are dilated or not, the choice of an appropriate treatment is often attended with great difficulties. The immediate effect of this change being to throw a powerful stream of blood into the arteries, and thus fill the capillaries

with arterial blood, active depletion, on the plan of Valsalva, has been strongly recommended by Laennec, not only for the purpose of removing the congestion, but with the view of reducing the hypertrophy of the heart itself. Dr. Hope has pointed out the injurious tendency of such extensive venesection, from its inducing a state of anæmia with its concomitant evils. But if the views of the tenth chapter of this work are correct, there is another very powerful reason against this treatment; for in proportion as the power of the muscular walls is diminished by it, so is the tendency to dilitation and tricuspid regurgitation increased, whereby congestion of the general venous circulation is produced. With these dangers before us, it is impossible to carry the system of depletion to any great extent. We must be content to relieve the tension of the vessels, when it seems considerable, by small bleedings, or by the application of cupping-glasses and leeches to the precordial region. This plan will often succeed more effectually in quieting the action of the heart than more copious blood-letting, which is often followed by strong reaction. At the same time sedatives and rest materially assist; in fact, it is seldom necessary to abstract blood at all if the patient be kept free from mental or bodily disturbance. The medicine which most powerfully controls the action of the heart is digitalis. It has with great truth been remarked by Dr. Munck, that with this object the tincture is preferable to the infusion, which in its turn acts more powerfully as a diuretic. But this drug is often very uncertain in its effects, and sometimes produces a state from which the patient is with difficulty recovered; whilst at the same time permanent amendment seldom results from its use. Poppy, hyoscyamus, and conium have appeared to me much safer remedies; but local anodyne friction, particularly with the belladonna liniment, or opium ointment, has seemed to afford more relief than any medicine administered internally. By adopting this line of treatment, we relinquish all attempts to diminish the size of the heart; and notwithstanding the extraordinary cases of Laennec, in which he informs us the heart was reduced to a wrinkled state, it is probable that the generality of experienced practitioners will agree that nothing is lost by thus abandoning the hope of a cure so chimerical, and which is obtained, if at all, by means so hazardous in their nature. Persons treated on the plan above suggested often live on year after year in comparative ease and comfort, greatly relieved, though still retaining a large heart.

"With a view of preventing that cerebral congestion which

many consider to be so much promoted by this state of the heart, it is advisable to employ the douche, or at least cold sponging on the head with regularity.

"There is another evil in prospect to which attention must be directed The same inflammatory action which in so many cases precedes hypertrophy, in many also induces valvular disease. As a prophylactory measure, therefore, mild mercurial frictions may be occasionally used over the precordial region. With the same object, and also for the purpose of preventing inflammations, which are apt to occur in a plethoric state of the vavular system, the diet should not be too stimulating, although sufficiently nutritious to sustain the strength of the patient; by adopting which treatment, the left cavities of the heart will not be irritated by the contact of blood formed from materials of too rich a nature.

"If now the action of the heart be enfeebled, it matters not whether this arise from attenuation or from a fatty and flabby state of the walls of the ventricles; in either case a tonic and sedative treatment is clearly indicated This will in most cases be better carried out by a generous diet, combined with mental repose, and such an amount of exercise as shall invigorate the system without inducing fatigue or hurrying the circulation. The sesquichloride of Iron with hyoscyamus is a valuable remedy in such cases."

There are cases of chronic heart disease in which symptoms of general obstruction are present. When the lungs are involved, the case is very formidable, and is generally drawing to a close. In the general obstruction attending diseases of this character we have to relieve the engorgement of the capillaries, and to remove the serum that has been poured out.

This may be accomplished by increasing the secretions of the kidneys, the bowels, or the skin. The former plan is generally much the most successful. In some cases simple diureties will succeed, such as a combination of squills, nitric ether, acetate or nitrate of potash, spirit of juniper, &c., with drinks made of cream of tartar, broom top, &c. When these fail, digitalis will often succeed. But as its depressing effect on the nervous system is not merely unnecessary, but in a majority of cases is positively injurious, it must be carefully guarded

with ammonia, wine, &c., and it is then a very powerful and safe diuretic.

The following is the formula recommended by Dr. Blakiston.

℞ Infusi digitalis (Nov. Pharm) ad Oss.
Spiritus ætheris nitrici, ℥ss.
Tincturæ scillæ, ℥ij.
Tincturæ cardamomi comp. ℥ss.
Potassæ acetatis, ℥iij.
Ammoniæ sespuicarbonatis, ℥ss. Misce.
Sumat ℥j bis vel ter indies.

Purgatives, though very valuable in certain forms of dropsy, have seldom, been attended with good results in my practice when the cause has lain at the heart. Elaterium often reduces the patient so suddenly, that he rallies with difficulty.

In some cases acupuncturation will afford great relief for a time, but it should not be indiscriminately performed in the scrotum or below the knees, lest it be followed by gangrene. Blisters on the thigh will sometimes also produce a beneficial effect, but are not generally so efficacious as acupuncturation.

Pleurisy, pneumonia and phthisis are the remaining topics of which this work treats. We can confidently recommend it to our readers as one from which they will derive much valuable instruction.

Art. VI.—*The Young Stethoscopist; or, the Student's Aid to Auscultation.* By Henry I. Bowditch, M. D., one of the Physicians of Massachusetts General Hospital. New York: Samuel S. & William Wood. 12mo. pp. 303. 1848.

This little work has gone to a second edition, and will doubtless pass through many more. It is a concise, clear, and comprehensive treatise on Physical diagnosis, such as every student requires; and it ought to be in the hands of every student. With such works as this multiplied industriously by a fruitful press, it is impossible but that progress will be made by the profession in this department of medical science.

Dr. Bowditch, in an appendix to his excellent manual, republishes the following case as illustrative of the bearing of auscultation upon medical jurisprudence.

"*First* Among the most deplorable cases on record, in which innocent human life was deliberately taken, according to legal forms and by the adjudication of the supreme tribunals of the land, that of the child of Mrs. Spooner, who was executed July 2, 1778, stands pre-eminent. Under our modern means of diagnosis of the earlier periods of pregnancy, especially with our knowledge of obstetric ausculation, such a case, I presume, will never happen again. It impressed me most deeply, for many reasons; but I quote it now, because it may stimulate you to the study of the minute stethoscopic phenomena of early pregnancy. You may at any time be placed in circumstances in which the knowledge of these may be of the highest importance to yo. Mrs. S. was convicted of having been an accomplice in the murder of her husband, and after having been condemned, she begged a reprieve, on the ground of being "several months advanced in pregnancy." The execution was stayed one month and the court ordered a jury of "matrons," or in other words, of ignorant old women, to be summoned, to decide on the question, whether or not she was "quick with child." This practice a relic of antiquated absurdity, was put in execution, and these twelve matrons, wise in medical diagnosis! with two men midwives decided that she was *not* "quick with child." Mrs. Spooner immediately sent to the Council a most touching petition, in which she says, "although the jury of matrons have not decided in my favor, still I am absolutely certain of being in a pregnant state, and above *four months* advanced in it, and the infant I bear was lawfully begotten. I am earnestly desirous of being spared till I am delivered of it. I most humbly desire your honors, notwithstanding my great unworthiness to take my deplorable case into your compassionate consideration. What I bear and clearly perceive to be animated, is innocent of the faults of her who bears it, and hath, I beg leave to say, a right to the existance God has begun to give it. Your honors' humane Christian principles, I am very certain, must lead you to desire to preserve life, even in this, its miniature state, rather than to destroy it. Suffer me, therefore, with all earnestness, to beseech your honors to grant me such a further length of time, at least, as that there may be the fairest and fullest opportunity to have the matter fully ascertained, and, as in duty bound,

shall, during my short continuance, pray." Notwithstanding this urgent appeal of a mother in behalf of her innocent unborn babe, the honorable council of Massachusetts ordered her execution, and thus inflicted a stain that cannot be erased from the annals of the jurisprudence of the State; and they did so notwithstanding that two men midwives and one of the "matrons" certified that they believed that Mrs. S. was quick with child, and that they had been mistaken in the verdict they had previously given! It was sufficient that Elizabeth Rice and Molly Tattman certified to the contrary, and that they believed her to be "not even now (June 27, 1778) quick with child."

With indecent haste, amid the fury of the elements, and the shouts of the crowd, this legal murder was consummated. On the evening of the day of execution, the "body was examined, as the prisoner had requested, and a perfect male fœtus of the growth of five months was taken from her."

As I have already stated, I quote this case chiefly to show the importance of every sign of early pregnancy in medico-legal questions. I have no hesitation in believing that, had auscultation been known and practiced on that occasion, it would have revealed the existence of the sounds of the fœtal heart, and this sad event would have been prevented. Does it not prove to the medical student the importance of accurate obstetric auscultation? For though we have improved somewhat in the forms of jurisprudence during the last seventy years, we are still liable to have the folly of a matron jury enacted over again by the advice of the wisest on the bench. The student of medicine ought always to protest against such an absurdity, and to claim for the auscultatory signs their relative and important place among the phenomena of early pregnancy.

Second. It may be your fate to be called upon, as physician of a prison, to state whether or not a prisoner has such disease of the lungs as to render his longer sojourn in confinement absolutely detrimental to life.

In like manner, the army and navy surgeon is always liable to meet such cases among the soldiery under his charge.

In all such circumstances auscultation may become of great value to you."

We cordially recommend this little work to our readers.

SELECTIONS

FROM

AMERICAN AND FOREIGN JOURNALS.

In what cases are alcoholic drinks indicated in Medical practice? By N. S. Davis, M. D., editor of the New York Annalist. —In the preceding articles on the physiological action of Alcohol, we have shown, that when taken in health, it diminishes the physical strength and power of enduring fatigue, interferes with the process of arterialization, diminishes the appetite for food, and changes the condition of the blood. And yet, while it continues to circulate unchanged in the blood, it exerts on the nervous system a peculiar and highly srimulating or exhilarating influence which renders the individual, not only wholly unconscious of his diminished physical energy, but often induces him to think it very much improved. If these conclusions are well founded, then we are prepared to understand the exact therapeutic application and value of Alcohol in all its forms.

1st. It cannot be properly prescribed as a tonic, to increase the permanent strength and energy of the whole or any part of the system. The position is one of great importance, as it is in direct conflict with the daily practice of many eminent practitioners; and hence the sooner its truth is either fully established or disproved, the better it will be both for the profession and the public. It is by no means rare to find patients belonging to all ranks of society, especially in our cities and large villages, who have been advised by their physicians to take a draught of fermented or distilled spirits, with each meal, as a remedy for the first stages of dyspepsia, or for simple debility arising from other causes. But a more deceptive

and pernicious practice cannot be adopted. We say deceptive, because the Alcoholic potion thus taken, instead of removing the gastric irritation, simply exerts such a degree of exhilarating influence on the nervous tissue, as to render the sensorium unconscious of the gastric suffering, and the patient is thereby lured on, until confirmed dyspepsia, or what is far worse, a confirmed appetite for Alcoholic drink, or both, is fastened upon him. A great number of cases might be adduced as illustrative of this position, did our limits permit; and we speak advisedly as the result of no small amount of personal observation; when we say that scores of drunkards and invalids are annually manufactured by this kind of medical advising. It is true that a patient while under the influence of Ether or Chloroform may be, not only destitute of suffering, but extremely happy, and yet the surgeon's knife will cut just as keenly and sever his limb just as certainly, as though he felt every stroke ever so sensibly. And it is equally true that an individual while under the temporary exhilaration of a glass of fermented or distilled liquor, may digest a dinner, or endure a degree of cold, without consciousness of suffering, which in the absence of such exhilaration would be extremely annoying, and yet both the dinner and the cold, like the surgeon's knife, produced their injurious effects on the stomach or system, just as much as though the patient had been acutely sensible to every unpleasant feeling.

It is this exhilarating power of alcohol, coupled with the diminished sensibility which it induces, that gives it popularity as a remedial agent in many states of the system, and under circumstances where its real effects can scarcely fail to be injurious.

2d. It cannot be properly prescribed for the purpose of improving the quality of the blood. We have had frequent occasion to observe cases like the following, viz:—A. B., aged 8 years, child of poor parents, lives in a basement room but poorly ventillated, food coarse, and often indigestible, clothing scanty and dirty, somewhat emaciated, pulse slightly increased in frequency, lips and tongue pale, has had sores about the ears and eruptions on the scalp, and several of the lymphatic glands of the neck are greatly swollen. Here is a simple case of scrofula, accompanied by an impoverished state of the blood, the legitimate result of bad food, bad air, and bad clothing Well, what is the remedy? The Doctor's reply is, plenty of good air, cleanliness, and such a diet as will promote the formation of good, healthy blood, viz: plenty of good bread, good meat, ripe fruit, and a little good wine or porter

every day. Now, unless we deny in toto, the correctness of the experiments of Prout and many others, which show that the presence of Alcoholic liquids in the blood, directly interferes with the indispensable process of arterialization, very much lessening the amount of carbonic acid exhaled, together with all that mass of evidence alluded to in our last number, we must admit that the wine or porter in such cases is directly calculated to defeat the object for which they are given, i. e., to promote the formation of healthy blood. We are well aware that many cases may be adduced in which rapid improvement was made while under the daily use of Alcoholic beverage; and we are equally aware that ten times the number can be adduced marked by improvement equally rapid and satisfactory without the use of one drop of such beverage. Are we then to conclude that the improvement is owing to the wine or other spirits, or to the change of air, cleanliness, and good diet, in spite of the Alcohol? Our own experience, as well as all the experiments hitherto performed in regard to the physiological action of Alcohol, incline us strongly to the adoption of the latter conclusion. On this subject we are happy to find our own views fully sustained by the writer in the British and Foreign Medical Review, to which we have already referred in preceding numbers. He says, "at present, nothing in the annals of quackery can be more truly *empirical* than the mode in which fermented liquors are directed or permitted to be used by a large proportion of medical practitioners. If their physiological action be really as grossly misunderstood as we deem it to be—if their benefit can be looked for in little else than their stimulating effects, and the belief in their permanently supporting character be really ill-founded—if we are to distrust the grateful sensations which commonly follow immediately upon their use, and to look for evil in more remote consequences (as the experience of the results of their habitual employment would lead us to do)—then it is obvious that a great change will be needed in our usual practice in this respect, in order to bring it into conformity with the mere corporal requirements of our patients, to say nothing of its bearing upon their moral welfare." Again the same writer says, when speaking of the use of fermented liquors in "chronic disorders of the digestive apparatus," that the "action of these, in such states of the system, is precisely like the application of the whip and spur to the horse already tired, which produces a temporary improvement in his pace and prompts him to get through his work the quicker, but which leaves him when he has done it, more fatigued than if he had

taken his own time." But if alcoholic liquors cannot be properly used either as tonics for permanent increase of strength, or for improving the quality of the blood in anaemia, for what are they applicable as therapeutic agents? We answer, that being powerful temporary stimulants, they are applicable to such cases, and such only, as are characterized by a failure of the organic system of nerves to sustain the all-important functions of respiration and circulation.

Such cases we meet with frequently among the typhoid forms of fever, and occasionally in the latter stages of all acute diseases. They are generally characterized by coldness of the surface, and extremities, feebleness of the pulse, and oppressed or diminished respiration. In these cases the blood has lost its power to arouse and maintain the energy of the organic nervous system; and hence the presence of the Alcoholic liquid is used in adding to its stimulating qualities, and if the dose is repeated with sufficient frequency to keep it constantly circulating in contact with the tissues, it may effectually prevent that fatal prostration which would otherwise ensue. It is thus, as a temporary stimulant only, that we believe either fermented or distilled liquors are applicable in the practice of medicine. And even when used in such cases, a due regard for the moral welfare of our patients, would induce us to so combine them with such bitter infusions as would effectually prevent the formatian of that appetite which has ruined and is still ruining thousands and tens of thousands.—*Ohio Med. Surg. Jour.—Annalist.*

Convention of Western Medical Schools.—We believe that the Medical Schools of the West are entirely willing to enter into the great progressive movement which is visible in our profession, and that only a mutual understanding is necessary to induce them to conform heartily to the measures proposed by the National Medical Association. That association hereafter, is to be the great exponent of medical public opinion, and will be as powerful as though it could wield the strong arm of the law. This is right. We rejoice to see our hitherto discordant elements combining and assuming a definite form and proportion. The schools cannot long resist the influence of this public opinion if they would, and ought not if they could. It is very desirable for the good of all, that there should be, as far as possible, an uniformity of action among the schools. One waits for another, and few will act if all do not.

We therefore formally propose, on behalf of the Faculty of the Starling Medical College, that the Medical Colleges in western New York, Ohio, Indiana, Illinois, Iowa, Missouri, Michigan and Kentucky, do send delegates to a Convention to be held in the city of Cincinnati on the last Tuesday in April next, or elsewhere, at a different time if it be deemed expedient.

We make this proposition from a desire to take a step in advance of our present position; and we know that other western schools sympathise with us. We shall hope to hear discussed, if the Convention meets, among others the following subjects;—the propriety of extending the Lecture term uniformly to five months—qualifications, both preliminary and professional for a degree—and the general subject of Lecture fees.

Let the schools, in good faith unite upon a "platform," and they will all flourish equally well, and advance more rapidly, the true interests of the profession and the public.

What say you, Buffalo, Cleaveland, Cincinnati, St. Louis, Chicago, Louisville, and the rest;—shall the Convention be held? Shall all the schools, amounting in all, we believe, to twelve, more or less, be represented? If the proposition meets your approval, will you take some means speedily to let it be known. We stand ready to do all we can, in any way, to forward this important measure.—*Ohio Medical and Surgical Journal.*

Successful Amputation at the Shoulder-joint, for Gun-shot Wound—patient under Chloroform. By Paul F. Eve, M. D., Prof. of Surgery in the Medical College of Georgia.—On the 11th of February, 1848, I removed the arm at the shoulder joint of a black boy, who had about 48 hours previous been accidentally shot. The discharge from the gun was received at a distance of only a few feet; it was loaded with squirrel shot, and tow was used for the wadding. This occurred in a neighboring county, and the patient was sent to Augusta by the railroad. Dr. Beggs, who saw him soon after the gun-shot wound was made, removed the tow, with some of the shot, and restrained the hemorrhage, represented to have been considerable. The wound presented an irregular ovoidal opening, of an inch to an inch and a half in diameter, upon the upper outer surface of the left arm, about an inch below the acromion process of the scapula, and the shot after cutting the

os humeri nearly in two, passed in the direction of the shoulder-joint and subclavian artery. His pulse when I first saw him, was over 100; his fingers of the injured side he said were benumbed, and he complained of pain in the region of the wound. The arteries of the left upper extremity pulsated distinctly; the age of the patient was 11; his general health good. His bowels had been moved with salts, and 50 drops of laudanum had also been given to procure ease and sleep.

Amputation at the shoulder-joint having been decided upon in consultation, assisted by Dr. Dugas, who by pressure upon the subclavian artery effectually controlled the circulation, and Dr. Means, who administered the chloroform, in the presence of the class in attendance at our college, the heel of the amputating knife was applied upon the anterior edge of the acromion, and by a continuous sweep around the head of the os humeri, two flaps, one anteriorly and the other posteriorly, were made, and the operation completed by ligating four or five arteries. In carrying the elbow forward, to throw the head of the bone backwards so that the knife might the more easily pass through the joint, the humerus was fractured, so near was its complete division by the shot, which must have entered *en masse*. The time consumed in the amputation, was thus increased by this fracture, but the longest estimate of those present was 22 seconds.

The insensibility produced by the chloroform was extremely satisfactory; the operation having been performed and the dressing applied without the knowledge of the patient. He was sitting up on the fourth, and left the surgical infirmary on the seventh day.

With the exception of some delay from the shortness of the flaps, owing to the destruction of the deltoid muscle by the wound, the discharge of a few shot from it, and some fever created or rather aggravated by worms, he had a good recovrey, and is now a hearty, well boy.—*Southern Medical Journal.*

Case of Traumatic Tetanus successfully treated. By S. C. Thornton, M. D.—During a practice of twenty-eight years, I have had the misfortune to lose all my cases of traumatic tetanus, and was almost ready to conclude that a genuine case of this terrific disease was never cured, and that those physicians who asserted that the malady was within the control of remedial agents, must have been mistaken in the character of

the disease. The following brief history of a case, will, however, disprove my former conclusions, and will aid in establishing the fact that tetanus may sometimes be cured; while it may afford additional testimony in favor of the use of the vapor of sulphuric ether, in those diseases where the nervous symptoms preponderate.

Case.—On the morning of the 12th of July last, I was called to see J. T., a stout robust Irishman, of sanguine temperament. and in the 24th year of his age; the tetanic symptoms were the result of an injury on his foot, occasioned by wearing a tight boot; they were very well developed, and the whole system participated in the peculiar spasmodic symptoms which characterize the disease. I immediately took from his arm twenty ounces of blood, and directed hyd: chlorid: mitis: grs. x, every two hours, and morph: sulph: gr. ½, every three hours, to be continued till my next visit. In the evening I saw him again, and directed the spine rubbed with pure potash, and to be covered with a blister extending from the nape of the neck to the os-coccyx, and to continue the calomel and morphia. The agonies of the patient were now extreme, severe spasms occurring every twelve or fifteen minutes. To allay these, chloroform and sulphuric ether were administered, and directed to be given alternately every hour during the night, in limited quantities, if circumstances should require it. The moment the patient came under the influence of the ether, he cried out "I am easy now." The paroxysms were not only moderated, but the intervals between them were much longer, so that the poor patient already experienced some relief. Nearly an hour would sometimes elapse between the paroxysms. He was ill for two weeks, during which time he would occasionally suffer from his tetanic symptoms, but good nursing and a steady perseverance in the remedies finally relieved him. The calomel was continued for the first four days; after that, reliance was principally placed upon the sudorific effects of the morphia and the anæsthetic agents which have been named. He took four hundred and ten grains of calomel, (by which he was freely purged and salivated,) twenty-five grains of morphia, consumed twenty-eight ounces of sulphuric ether, and eight ounces of chloroform, and I really think it was not wasted, for he was well nursed; so you may see an Irishman is not to be poisoned by ether or chloroform, calomel, morphia, or pure vegetable caustic—for he is now well.—*New Jersey Medical Reporter.*

Remarks on the Treatment of Pseudo-membraneous Laryngitis.—Among the diseases of childhood, there is probably none which has excited more attention and solicitude, than that usually known as membranous croup. Having in the early part of my practice met with several cases which terminated fatally, and an opportunity being thus afforded of making repeated post-mortem examinations, the result of these observations, and of the practice subsequently adopted, are freely communicated. The disease was considered one of high inflammatory action, and treated as such; hence local and general depletion were resorted to, to relive the inflammation, and emetic and mercurial remedies freely employed to meet their separate indications. By some it is now considered judicious practice, to bleed copiously from the arm, even where very young children are our patients; to commence immediately afterwards with antimonials, blisters, and local depletion. It is acknowledged, however, that the disease is proverbially fatal; it has not yielded to the ordinary treatment; the heroic system of bleeding, purging, vomiting, blistering, &c., has not proved equal to the insidious enemy against which it has been arrayed, and though men who stand at the summit of professional eminence may lose their patients without loss of reputation, younger members of the profession cannot so well withstand, in their early career, the proscriptive course pursued by the enemies of our profession, or the suspicions of parents or friends, that all the means of our art were not faithfully applied; and yet the practitioner in review of his course, may console himself with the reflection that every thing was done; the lancet was brought into requisition to subdue the inflammation, emetics were employed to throw off the false membrane, counter irritants were applied, to invite the diseased action to the surface, the warm bath was resorted to for the purpose of relaxing the system, tartar emetic was given freely to moderate the circulation; and all the collateral remedies within the sphere of our knowledg, were brought to bear in the treatment. If these have all proved unsuccessful in the best hands, and in a majority of cases, we are justified in resorting to remedies more mild and palliative in their tendency, as the result cannot be worse.

The post mortem appearances of two cases which came under treatment about the same time, and died within a few days of each other, will be briefly presented. The first was a child about four years of age, in which the peculiar respiration, loss of voice, and other symptoms were well developed; there could be no mistaking its character—free depletion was at

once resorted to, and the child put upon the use of calomel and tartar emetic, in divided doses, repeated at intervals of an hour, the warm bath was freely employed, oil of turpentine rubbed upon the throat, with alliaceous poultices to the extremities. Free emesis was induced whenever the dyspnœa became alarming, but the disease went steadily on, the symptoms abating but for a short time, and a dreadful death terminated the sufferings of the patient, in less than a week. At the same time I was visiting a child about 18 months old, with my friend, the late Dr. Isaac S. Haines. The same course of treatment was pursued, the symptoms being similar, leeches were twice applied to the throat, and counter irritation established upon the chest. It died also—extreme restlessness and anguish preceded the hour of dissolution, the countenance becoming livid, and expressive of intense suffering. In the first case, an examination after death revealed the following appearances—slight redness of the fauces, with a false membrane lining the whole track of respiratory passage from the glottis to the bronchi; it was a perfect tube adherent in some places, but loose in others, the whole of the larynx and trachea were removed, with a portion of the bronchial bifurcation, and the specimen preserved. It is now in the collection of Prof. Pancoast, of the Jefferson College, Philadelphia. The membrane was tough and leathery, not at all vascular—there was slight engorgement of the laryngeal vessels, and a partial congestion of the lungs. In less than sixty hours afterwards the remains of the second child were subjected to our inspection, and what was our surprise on finding not the slightest membraniform exudation in the whole course of the respiratory tube—the lungs gave us their usual crepitant sound; the larynx and trachea were unobstructed, while a slight secretion of mucus covered the boundaries of the glottis; but there was nothing in this secretion that gave evidence of its being any thing more than the natural fluid which is furnished by the follicular glands of the part for the purpose of lubricating the chordœ-vocales. In fact, there was no evidence of violent disease, and yet the patient died in the same manner, and went through the same symptoms as in the first case. The idea immediately suggested itself that there must have been a violent spasm of the glottis, or of some portion of the trachea, in order to create a train of symptoms so alarming and fatal. Since that period, five cases of the disease have come under my care; one had been treated by an irregular practitioner for several days, according to the sweating system, and died shortly after I saw it. The other four recovered—they were

not bled, generally or locally—the treatment was alterative and palliative. In two instances the false membrane was discharged in separate pieces, retaining its tabular form, but soft and easily broken. In the other two there was no appearance of membrane in the matter vomited or evacuated by stool. The treatment employed was as follow:

Directions were given that the patient should be kept in a room of moderate and equable temperature, and small doses of calomel (regulated according to the age of the child) given at intervals of an hour apart, until the bowels were freely moved. After free catharsis, small portions of Dover's Powder or Ipecac. were added to the mercurial, with a view of producing the diaphoretic and anodyne action of the one, and at the same time of promoting the alterative effect of the other. While these remedies were being sedulously administered; the direct application to the diseased surface, of a solution of nitrate of silver in the proportion of a scruple to the ounce, was made every two or three hours, by means of a probang. Even if the attendant does not succeed in penetrating the larynx with this instrument, the action of the remedy is conducted by sympathy along the mucus membrane which lines the larynx and trachea, and in this way proves serviceable. Where there was much nervous disturbance, assafœtida injections were administered with decided advantage. We have seen a child restless with suffering, speedily quieted by this remedy. When the membrane becomes detached from the walls of the trachea, which may be known by the rattling sound produced in respiration, a simple emetic of Ipecac: or sulphate of copper, was administered to throw it off.

This mode of treatment was adopted from a supposition that the true pathology of the disease is different from that generally received as correct. The depletory plan would certainly be more successful if the disease was one of a purely inflammatory character; but as the treatment indicated by the presence of inflammation is unsatisfactory, it is fair to conclude, that this view of its pathology is not correct. The membrane appears to be an exudation from the blood, differing in some respects from an ordinary lymphatic deposite, and not to be arrested in its formation by abstraction of blood alone. If the treatment detailed, proves to be successful after a more extended trial, it will be also fair to conclude that the specific action of mercury is necessary to arrest the tendency in the blood to the formation of the adventitious substance which so peculiarly belongs to this disease. I am free to admit that the cases cited above, were presented under the most

favorable circumstances; they were seen in the early stage of the disease, and every direction was carefully carried out by the attendants. Constant watching and faithful nursing, contributed greatly to the success of the remedies employed, and yet they were cases in which the symptoms of membranous croup were fully and decidedly marked, and in which they increased in severity, until the system yielded to the mercurial impression. While calomel and nitrate of silver may be justly extolled as the most potent remedies in this disease, those medicines which rank under the class of nervous stimulants, usually called anti-spasmodics, deserve a conspicuous place in the catalogue of remedies, and we would urge upon the profession the importance of considering their claims to notice, in the treatment of this fearful malady.—*New Jersey Medical Reporter.*

Constitution and diseases of Mexicans. By Robert Newton, M. D., U. S. Army.—In stature the Mexicans are very inferior. The Indians are several inches below what is regarded as mediocrity with us. The inclination to degenerate in size, is remarkable in the Mexican horse, jackass, and their product, the mule; and the dog is smaller than the animal of the same species in our own country.

Both the Spanish and Indian Mexican is of a nervous temperament. The body and mind are highly sympathetic with each other. The sensibility of the nervous expansions is keen. The remark which has been made by some of our officers, that Mexicans entertain a great tolerance of pain, is, I am convinced, erroneous. Though the Indian from his taciturnity and reserve makes an effort to restrain an exhibition of his sufferings, the involuntary expressions which I have witnessed, convince me that his feelings are very acute. Nervous complaints are exceeding common though more especially with the white portion of the community.

The Indian is distinguished for a capacious chest and a small abdomen.

Among both sexes of the Creoles, and among the females of the Indian race, the adipose tissue is apt to present a remarkable development.

The Indian exhibits a fine instance of muscular development. The strength he is capable of exerting is superior to that of an European laborer. His great power is particularly manifested in the carrying of burdens. A large chest, small belly

and ample muscle, constitute the conformation of men, who without fatigue, can march in a day twice the distance the European is able to accomplish.

The natural intellect of the Creole is certainly good, that of the Indian very contracted. Humboldt thinks, that when the mind of the latter is educated, it manifests a tendency "to subtilize and seize the finest differences in the comparison of objects." He at the same time ascribes to him an almost utter destitution of imagination. Both races possess social feelings susceptible of great refinement. Though their semi-barbarous condition and the unprincipled character of some of their chiefs, have stained their national history with examples of savage ferocity, the real nature of the people is gentle and compassionate. One of the greatest of their faults is too little independence of thought and feeling.

The longevity of the Spanish portion of the inhabitants is not great. It is quite rare to see a man of very advanced age. The Indians live longer. The annual number of births in the capital, in the mean for a term of one hundred years, was 5930, and that of deaths, 5050; so that, apart from immigration, the population has had very little tendency to increase.

I now proceed to the consideration of the particular diseases as manifested among the inhabitants of this city.

Intermittent Fever is by no means a fatal disease. The season of its greatest prevalence is that of April and May.

Remittent Fever is almost totally unknown.

Typhoid Fever is very common in all seasons, but is most so in April and October. Ithas the pathognomonic characters which were first noticed by the pathologists of Paris. In the 3d, 9th, and 14th Regiments of Infantry, since their arrival in this city, the fever has prevailed to a very considerable extent.

I arrived here early in December, when I joined the regiment of mounted riflemen. Previously there were a number of cases in the regiment, and the disease had proved fatal to my zealous and indefatigable predecessor, Assistant-Surgeon Suter. But after him, no others in the regiment were affected until the weather became mild.

The cases of typhoid fever which I have seen in the Mexican hospital San Hipolito, and those which have come under my own charge, have be enmarked by pyrexia; a rose-colored lenticular eruption; tenderness of the bowels, and particularly in the region of the ilio-cœcal valve with a gurgling sound when pressure is made in the latter region; looseness of the

bowels; headache; injected conjunctiva; deafness; more or less stupor; a brown tongue, and a collection of sordes on the gums and teeth; with a belief of the patient that little or nothing was the matter with him. In the most severe cases, there were delirium, subsultus tendinum and involuntary evacuations. Some were accompanied with bronchitic or pleuritic complications. The treatment I have pursued, (and which, in the limited number of cases that have been under my charge, has always been successful,) has been to shave the head and apply to it wet cloths, institute a mucilaginous diet, purge the bowels with castor oil once, or more frequently, (if there is much pain in the bowels and the excretions are vitiated,) apply leeches and poultices to the belly, and administer neutral mixture so long as there is preternatural heat and dryness of the skin. If the irritation of the alimentary canal have not been great, I have sometimes given the tartrate of antimony and potassa, with lemonade. When the pleura is affected, I have cupped repeatedly, and endeavored to bring the system under the influence of mercury. I have been studious to cause in the patient's room, a constant renewal of the atmosphere, and, during the day, have sometimes removed him to the open air. The shirt and bed-clothes have been frequently changed.

To the *Smallpox* is due the terrible reduction which the Indian population has experienced in some parts of this country since the first entrance of the Spaniards. The disease appears almost exclusively in the form of an epidemic, occurring at very marked intervals. Its ravages were awful in 1763, and still more so in 1779, when in the capital alone it destroyed more than 9000 persons. "A great part of the Mexican youth were cut down that year." In consequence chiefly of the introduction of the variolous inoculation, the epidemic of 1797 was less destructive. The vaccine inoculation was first introduced in 1804, by Thomas Murphy, who brought the matter from the United States. It was readily submitted to by the inhabitants, who had previously been convinced of the value of an analogous process—inoculation with variolous matter. The introduction of vaccinnation was matured by a Spanish medical commission, which was despatched by the Government to carry the process into Mexico and other Spanish colonies. Original matter has been obtained from the udders of cows in Atlixco and near Valladolid. Although the smallpox, now that its extension and violence are controlled by vaccination and rational treatment, is divested of much of its fearfulness, in the history of Mexico it stands pre-eminent

as the instrument of death. Terrible must have been its ravages to have given occasion to the statement of Motolinia, that in 1520 it carried off one half of the inhabitants.

Yellow Fever does not appear in the capital of the republic, but the *Matlazahuatl*, a disease described as resembling the former, has raged here as an epidemic in times long past. It occurred in the years 1545, 1576, and 1736. Torquemada estimates the mortality caused by it in the first mentioned year at 800,000 and in 1576, at 2,000,000. It is remarkable for not attacking whites and those in whose veins is mingled the blood of the white man.

Diarrhœa and *Dysentery* are, when taken aggregately, charged with a greater mortality than any other disease. Indeed, this mortality amounts to nearly one-fifth of the whole.

That form of *hepatitis* which results in abscess is very common—these abscesses often discharge several pints of pus. It has been found best to make a very free external opening to the abscess; nor is it thought necessary to be solicitous about the admission of air, which is not supposed to be injurious. At least, the advantage accruing from maintaining a passage constantly free for the issue of pus, more than counterbalances the injury from the air. In this way, I learn from Dr. Galenzowsky, more than one-half of the cases are cured.

Catarrh and *Bronchitis* are diseases of ordinary occurrence; but *Phthisis Pulmonalis* is very rare. *Vesicular Emphysema* is frequent.

Mexicans have already been stated to be subject to nervous affections. Among these may be specified cephalalgia, epilepsy, neuralgia, paralysis, and chorea.

Calculus is very seldom met with in the city of Mexico. In some other parts of the republic, it is more common.

In respect to *venereal diseases*, they may be stated to be one of the greatest banes of the country. There are few males of middle age in the city of Mexico, who have not been subjects of this disease. Nearly all of the lower class of females, also, have been affected. This is at once an effect and illustration of the immorality of the population. The chancre among the Mexicans is generally of the Hunterian character, and apt to be followed by secondary symptoms. I have frequently heard our medical officers affirm the difficulty of managing venereal affections in this place.

Dropsies are common. *Hemorrhages*, though the fact may seem strange in a country where the external pressure of the atmosphere is slight, are rare.

The inhabitants of this city are much subject to *Pericarditis* and *Endocarditis*, and also to *organic affections* of the *Heart*. Ossification in the vascular system, however, is said not to be unusually frequent.

But one of the most strikingly common diseases in this place, is *Senile Gangrene*. Being present recently at an amputation of the thigh, performed on account of this disease, I extracted the popliteal artery, which clearly demonstrated, in part, the pathology of the affection. In the cardiac portion of the artery is a coagulum of blood; but situated in the peripheral portion, and separated from the coagulum by a narrow section in a state of transition, is a cord of white fibrin. It is to be supposed, that the inner coat of the artery being inflamed caused a coagulum of blood (as in the analogous case of endocarditis,) which was succeeded by fibrin.

The poor are much affected with *indolent ulcers*, generally situated in the legs. These ulcers are a frequent cause of death.

In walking the streets, one constantly meets persons with *affections of the Eye*. The most common are opacity of the cornea, fibrinous occlusion of the pupil, and inflamed and hypertrophied conjunctiva. Although many cases are exhibited for mendicant purposes, enough others are seen to convince a stranger that the number is extraordinarily large. Inflammations of the cornea and iris, it is well known must be treated promptly and judiciously or the sight will almost certainly be lost by the exudation of coagulable lymph. Now there is probably no more improvident people in the world than the poor of this city. Need we wonder then at the opacities and occlusions? Besides, when we reflect that iritis is frequently produced by syphilis, and that conjunctivitis, as well as inflammation of deeper tissues, is a result of gonorrhœal inoculation and of catarrhal influence, and, moreover, that syphilis, gonorrhœa, and catarrh, are here exceedingly prevalent, we have a most satisfactory explanation.

Considering the fact that close study is not an ordinary phenomenon among Mexicans, *Myopia* is found in the cities of the table-land to an extraordinary extent.

To *diseases of the Skin*, the constitution of the Indian seems rather disinclined. There is, however, one horrible cutaneous affection which is frequently encountered. This is the *Elephantiasis Græca*. There are three forms. The first is characterized by tubercles generally varying from a quarter, to three quarters of an inch broad; disposed to squareness of shape; projecting, red or livid in the beginning, susceptible of

change to a bronze hue; sometimes indolent, at other times more sensative, and accompanied by a swelling of the subcutaneous cellular tissue; preceded by spots of a variable red; beginning usually at the root of the nose, and extending over the head and upper extremities, then affecting the lower, but seldom occupying the trunk. This is called the tuberculous form. The second called the anæsthetic, is characterized by want of sensibility in the extremities of the limbs, and by absorption of the bones. I have seen the auricular and annular fingers as completely removed by absorption as by amputation at the metacarpo-phalangeal articulation, and without any semblance of a cicatrix. The third form was first described by Dr. Lucio, physician to the San Lazaro Hospital, in this city, for the accommodation of patients of this disease. It consists principally in the production of red and painful discolorations, which commonly terminate in ulceration. The subjects of this form are called lazarinos. Two or more forms sometimes co-exist in the same individual. Dr. Lucio has discovered in the inspection of such as die from this disease, the frequency of certain alterations in the spleen. The first and second forms may be regarded as incurable. The patients, after having been affected many years without any material derangement of general health, usually die with diarrhœa; and in such cases the mesentery is found to contain deposits of tubercular matter. The San Lazaro Hospital was erected in the year 1811. In the year 1844, it had received in all, 82 women and 123 men. Elephantiasis affects only the poor, and particularly such as are exposed to strong heat and humidity. All the patients in this city come from the western side, though I am not aware of any explanation of this fact. The subjects are from 15 to 40 years old.

Looking for the local causes of disease, the mind immdiately recurs to the large expanse of surface in the valley of Mexico, which is annually flooded by rains and dried during the dry season. The portion subject to these changes is not less than one-tenth of the whole valley. Here is a grand laboratory for the production of intermittent miasmata. These, however, do not appear to be evolved in the highest amount until the close of the dry season, when the heat is greatest, and the superimposed layer of water has been evaporated.

Another cause of disease is the humidity of the atmosphere during the wet season, when heavy rains occur every day, frequently flooding the streets of the city. The perspiration of the body not being duly evaporated, it becomes necessary that the supply of heat should be diminished to prevent the

temperature of the system rising above the normal standard. This supply is founded in the conversion of the carbon of the system into carbonic acid gas, and can be diminished in several different ways. It may be effected by the deposition of carbon in the form of fat, a process, however, which nature is frequently indisposed to adopt. Then the supply of carbon to the system may be curtailed by reducing the amount of food, which is the appropriate mode of overcoming the difficulty. Nature indicates this course by lessening the appetite in such cases. But when the constitution is disinclined to the formation of fat, and when the appetite is artificially stimulated as it is in Mexico by the constant and excessive abuse of alcoholic drinks, red pepper and garlic, then the superabundant carbon remains only to be eliminated by the liver as an element of the bile. The excitement of the liver necessary for this extraordinary labor, disposes it to inflammation. The increased vascularity of the intestines required for a supply of blood by the portal circle, sufficient for the extraordinary secretion of bile, renders the intestinal canal also predisposed to inflammation. This predisposition of the canal is increased by the irritation attending the reception of the unusual amount of bile and of fruits, here almost unlimited in variety, and some of which are not very healthful. Now if a man in the condition just described, with his system overheated and debilitated, go out doors into the rain and wet his feet with water which has flooded the streets, the surface of the body is too rapidly cooled, and the liver or bowels, already excited, become almost unavoidably the seat of inflammation. We have thus no difficulty in understanding why hepatitis, dysentery and diarrhœa are here so frequent.

The very great difference in the temperature of day and night, and of sunshine and shade, with the thin mode of dressing, is a sufficient cause for the prevalence of catarrhs and bronchitis, as well as other internal inflammations. It is true that the contiguity of the lakes has a tendency to equalize the temperature of day and night; but there are other causes which render it extremely unequal. These are, the clearness and stillness of the atmosphere; the want of trees and other projecting bodies; and finally the rareness of the atmosphere, which, in consequence of this rareness, has less power to maintain an equilibrium in the heat of the body, and leaves it more exclusively exposed to the influence of radiated caloric. The latter agency, in connection with the thickness of the walls of houses, renders the change of temperature very great in passing from the sun into the house. Drafts of air, howev-

er, have for the same reason, less potent influences here than in a denser atmosphere.

To the rareness of the atmosphere, also, as may be reasonably imagined, should be attributed the prevalence of vesicular emphysema.—*New York Journal of Medicine.*

Œdematous Laryngitis successfully Treated by Scarifications of the Glottis and Epiglottis. By Gurdon Buck, Jr., M. D., Surgeon to the New York Hospital, &c. &c.—Within the short period of eleven months there were no less than eight cases of this rare disease in the New York Hospital, of which seven occurred between the months of December, 1847, and February. 1848. During this latter period the season was remarkably rainy and wet, accompanied with very little snow, and characterized by the prevalence of erysipelas and typhus fever, as well as an asthenic type in other diseases, both in and out of the hospital.

More than a year previous to the occurrence of the first of these cases, and without any knowledge at that time of any similar method of cure having been practised or proposed by others, I was led to the conviction that scarifications of the œdematous edges of the glottis, as well as of the epiglottis, might be employed as an effectual means of relief in this formidable disease; and when the occasion presented itself of carrying into effect these views, the remark was made to my assistants at the hospital, and other gentlemen present, that such had been my convictions, and that the first opportunity had now occurred of applying them to practice.

The well known fatal character of the disease warranted the trial of any new remedy that afforded a reasonable prospect of benefit.

In connection with this operation, the employment of the touch was naturally regarded as of great importance as a means of exploring the diseased parts, and thus establishing the diagnosis beyond doubt.

Though the œdematous swelling of one or both edges of the glottis is the cause of the dyspnœa, from the mechanical obstructions it presents to the entrance of air into the larynx. yet, as will hereafter appear, the epiglottis almost always participates in the swelling, and being within reach of the forefinger passed into the mounth, it affords an invaluable means of diagnosis.

The following is the mode of performing the operation of scarifying, as employed in the cases about to be related.

The patient being seated on a chair, with his head thrown back, and supported by an assistant, he is directed to keep his mouth as wide open as possible; and if there be any difficulty in this respect, a piece of wood an inch and a quarter in width, and half an inch in thickness, is to be placed edgewise between the molar teeth of the left side. The fore-finger of the left hand is then to be introduced at the right angle of the mouth, and passed down over the tongue till it encounters the epiglottis.

But litttle difficulty is generally experienced in carrying the end of the finger above and behind the epiglottis so as to overlap it and press it forwards towards the base of the tongue. In some individuals the finger may be made to overlap the epiglottis to the extent of three-fourths of an inch.

Thus placed, the finger serves as a sure guide to the instrument to be used, which is represented accurately in the accompanying plate. The knife is then to be conducted with its concavity directed downwards, along the finger till its point reaches the finger nail. By elevating the handle so as to depress the blade an inch to an inch and a half farther, the cutting extremity is placed in the glottis between its edges; at this stage of the operation the knife is to be slightly rotated to one side and the other, giving it a cutting motion in the act of withdrawing it. This may be repeated without removing the finger, two or three times on either side. The margin of the epiglottis, and the swelling between it and the base of the tongue may be scarified still more easily with the same instrument, or scissors curved flatwise may be employed for these parts, guided in the same manner as the knife.

Though a disagreeable sense of suffocation and choking is caused by the operation, the patient soon recovers from it, and submits to a repetition after a short interval. In every instance the operation has been performed twice, and in some three times.

Before proceeding to the operation, it has always been explained to the patient, that the seat of his difficulty was a swelling at the top of the windpipe, preventing air from entering, and the object of the operation was to cut it and let out fluid, and thus give him relief. This explanation corresponds so exactly with his own sensations, which refer to the top of the thyroid cartilage as the seat of obstruction, that he readily submits to the proposed operation, and renders all the co-operation in his power for its performance.

A slight hemorrhage follows the scarifications, and should be encouraged by gargling with warm water. In one instance the quantity of blood mixed with sputa amounted to half a wineglassful.

The first case for employing the operation was the following:

Case I.—Arthur W. Taylor, seaman, born in New York, aged thirty-one years, was acting as nurse in Ward No. 4, south building, New York Hospital. For two days previous to the 13th of April, 1847, when his case was first noticed, he had suffered from painful deglutition, with enlongation of the uvula, that kept up a constant tickling sensation—the fauces also presented an inflamed appearance. The epiglottis was seen as well as felt to be swollen. Breathing was difficult, and attended with paroxysms of suffocation.

A stimulating gargle had been used, and, on the morning of the above date, the uvula had been excised with some relief. Six leeches had been applied over the larynx, and the bites were still bleeding at the time of the regular visit at noon. After exploring the parts with the finger, and ascertaining the existence of swelling of the epiglottis, and also allowing my two assistants to do the same, I scarified the aryteno-epiglottic folds and the epiglottis, partly with scissors curved flatwise, and partly with a sharp pointed curved bistoury, guarded to within one-third of an inch of its point by a narrow strip of adhesive plaster wound around it, and conducted to the parts upon the fore-finger of the left hand, previously introduced at the right angle of the mouth. Two or three repetitions were requisite, at short intervals, to complete the operation. The patient hawked up three or four teaspoonfuls of blood, mixed with mucus, and expressed himself as feeling relieved. Twenty ounces of blood were drawn from the arm soon after, and grain doses of tartar emetic administered.

On the following day (the 14th), an improvement in the respiration had evidently taken place.

On the 15th, respiration was still further improved, the pulse was 84, and soft, patient complained of soreness of the scarified parts. Antimony was stopped.

On the 17th he was much improved in all respects, pulse 68.

On the 23d he was discharged cured.

Case II.—On the 13th of January, 1848, I saw, at Dr. Swett's request, Daniel McGraw, aged 30 years, a farmer,

born in Ireland, (in Ward No 8, North Building, New York Hospital,) who was attacked the evening previous with sore throat, difficulty of swallowing and dyspnœa.

Inhalation of vapor of warm water, poultices to the neck, and a blister over the sternum had afforded him no relief. Patient's countenance was pale and had an anxious expression, his lips were livid. Inspiration was difficult and labored, expiration easy.

The voice was altered and hoarse. The velum, uvula and tonsils were moderately swollen, red, and coated with a grayish-yellow viscid secretion. With the fore-finger the epiglottis was distinctly felt to be swollen, and its margin thickened and folded together. The pouches between it and the base of the tongue were filled up by a soft pulpy swelling. Dr. Swett also explored the parts and found them as described. At 10½ o'clock, A. M., I scarified the edges of the glottis as well as the epiglottis, and the swelling anterior to it, with a sharp pointed curved bistoury and curved scissors, as in case 1.

Slight hemorrhage followed, and was encouraged by a warm water gargle. The exploration of the parts, as well as the operation itself, did not cause much disturbance, and patient expressed decided relief. A solution of nitrate of silver, twenty grains to the ounce, was applied to the fauces one hour after the operation and once the following morning.

At 2½ o'clock, P. M., the same day, patient breathed more calmly and felt still further relief. He passed the following night very comfortably, and the next morning expressed himself quite well. The swollen parts were ascertained by the touch to have very much diminished. His further progress continued favorable without any repetition of the scarifications.

The patient had been in the ward since the 29th of the preceding month with ship fever of a mild type, and was considered as making favorable progress at the time of the above attack.

Case III.—On Tuesday, the 29th of February, I saw Edward Bird, a farmer of rather slender frame, aged 50 years, born in England, and patient of Dr. R. K. Hoffman, in Ward No. 10, Main Building, with symptoms of œdematous laryngitis.

The same morning he had first complained of sore throat attended with hoarseness and difficult breathing, especially during inspiration.

The epiglottis was felt with the finger to be swollen, thick-

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The same morning he had first complained of sore throat attended with hoarseness and difficult breathing, especially during inspiration.

The epiglottis was felt with the finger to be swollen, thick-

ened especially at its margin, pulpy and convoluted upon itself. The pulse was full and strong, though sixteen ounces of blood had, within two hours, been drawn from the arm, and vomiting produced by means of compound syrup of squills. Twenty grains of calomel had also been administered, and the throat fomented with warm applications. At 2 o'clock, P. M., no relief had been afforded by the above measures.

Before resorting to scarifications, two or three of my colleagues present explored the parts and satisfied themselves of the existence of the swelling as described.

The patient being seated upon a chair and his head supported, I scarified the edges of the glottis as well as of the epiglottis, with a curved knife, such as is represented in plate ii. fig. 1, and repeated it two or three times at a few moments' interval. Slight hemorrhage followed. But little disturbance of the parts was produced by the operation, and the patient expressed himself as feeling relieved.

While the end of the finger was pressing the epiglottis against the base of the tongue, the soft pulpy swollen edges of the glottis were felt rising up against it.

My colleagues, Drs. Hoffman, Post, Watson, and Swett, besides the assistants and fifteen or twenty pupils, were present at this operation.

The same evening six leeches were applied over the larynx, and nitrate of silver on either side of the neck externally.

The following day, at 1 o'clock, P. M., the patient replied to the inquiry how he was, that he felt "fifty pounds better;" the dyspnœa, however, was still considerable and the voice the same. He was ordered two grain doses of calomel every two hours, and one-eighth of a grain of tartar emetic at the same interval, alternating them with each other.

Second day.—Patient is no worse, his respiration is much the same, and no paroxysms of dyspnœa have as yet supervened; his pulse is 120, full and strong. Calomel and tartarized antimony are continued.

At 6 o'clock, P. M., the same day, the dyspnœa having rather increased, I repeated the scarifications with the guarded bistoury, (the curved knife being in the hands of the cutler,) but without accomplishing the operation satisfactorily.

Third day.—The patient is decidedly worse, the obstruction to respiration has evidently increased, and paroxysms of dyspnœa and choking have supervened. The epiglottis is felt to be more swollen. The voice is more affected. The pulse is full and strong. Two five grain doses of sulphate of copper

had been administered and produced vomiting, but without relief.

At 3 o'clock, P. M., I repeated the scarifications with the curved knife in the usual way, and they were followed, as before, with moderate bleeding.

At 6 o'clock, P. M., though the patient expressed himself as feeling some relief, the obstruction still appeared so great, and the danger of suffocation during the night so imminent, that my colleague, Dr. Hoffman, and myself, considered that tracheotomy ought to be resorted to without further delay, and we both of us urged upon the patient to submit to it, but he obstinately refused.

At this time an erysipelatous blush had shown itself on the right cheek. Another patient in the ward had been seized with erysipelas the same morning.

The calomel and tartarized antimony to be continued as before.

Fourth day.—To our great surprise patient is still living, and apparently no worse; he says he feels himself better; pulse has not fallen off, and the paroxysms of dyspnœa have not recurred. The erysipelas is spreading upon the temple and forehead, attended with moderate swelling.

Fifty day.—Patient is decidedly better, and at evening the epiglottis was ascertained by the touch to be of its normal size.

Sixth day.—A still further improvement in respiration has taken place, and the voice is resuming its clear tone.

The subsequent progress was favorable. The erysipelas pursued its course in a mild form and gradually subsided. No mercurial ptyalism was at any time perceptible, and in a few days the patient was free from all symptoms of laryngeal disease.

When seized with the above attack, this patient was confined to his bed in a very debilitated condition, with fracture of the right os brachii at its neck, that had happened six weeks previously on ship-board where he had been exposed to typhus infection; several of his fellow passengers and his own wife, having died of the fever on the voyage.

Case IV—Was a patient of Dr. Swett in medical ward No. 9, North House, New York Hospital, named James Rourke, aged 27 years, born in Ireland. On Tuesday, February 28th, 1848, at 2½ o'clock, P. M., was suffering with well marked symptoms of œdematous laryngitis, that had supervened in

the progress of typhus fever at about the end of the third week. An abundant petechial eruption, great prostration, subsultus tendinum, and extensive bronchitis had characterized the fever. A supporting and stimulating plan of treatment had been pursued, and a large blister had been applied over the chest within a day or two for the relief of the bronchitis. Patient was also taking Stokes' Expectorant. When seen, his breathing, especially during inspiration, was difficult and sonorous, and his voice hoarse.

There was some soreness of the throat with a copious expectoration of viscid mucus.

The velum and fauces were of a deep red color, clean and free from swelling or exudation upon their surface. With the finger, the edge of the epiglottis was felt thickened, swollen, and pulpy, by Dr. Swett, as well as myself. The glosso-epiglottic frænum and pouches on either side were not swollen.

I scarified the edges of the glottis and the epiglottis, two or three times at a few moments' interval, which was followed by slight hemorrhage, and from which patient admitted that he felt some relief, though from the confused state of his intellect incident to the fever, his own testimony was considered doubtful.

Some difficulty was experienced in the operation from the involuntary closing of the jaws as if by a movement of subsultus, by which the left fore-finger was compressed between the teeth. The instrument used was the curved knife. On the following day, patient was found to have passed the night comfortably and was no worse, the hoarseness and dyspnœa were about the same; no paroxysms of suffocation had as yet supervened. Stokes' expectorant and stimulants were continued.

Second day, 4 o'clock, P. M.—Patient is decidedly worse, dyspnœa very much increased, paroxysms of suffocation and choking have now supervened, and are excited by attempts to swallow and on falling asleep, during which the face and lips become livid. The pulse is 80, full and quick, the skin warm and dry, the tongue brown and dry, and the throat clogged with viscid mucus; the epiglottis is felt to be much more swollen. I repeated the scarification very freely, taking the precaution to insert a piece of wood between the molar teeth on the left side to protect my finger. More hemorrhage followed the scarifications than in any previous operation. At least one ounce of florid blood was hawked up mixed with mucus, and patient expressed himself very much relieved. After this there was no recurrence of paroxysms.

Third day.—The case is going on favorably, respiration is decidedly easier, the pulse is good and 80 per minute.

Fourth day.—The improvement continues, the tongue has become white and moist, and the temperature of the surface more moderate. The epiglottis has nearly resumed its natural condition. Stokes' expectorant has been continued and the blistered surface kept sore. In a few days after, the voice recovered its natural tone, and the patient began to leave his bed. He was discharged March 30th, cured.

Case V.—Dr. Swett's patient.

On Sunday morning, March 5th, at 10 o'clock, I saw Peter M'Evan, aged 24 years, an athletic seaman, in ward No. 6, North Building, New York Hospital, who was suffering from the most intense dyspnœa.

He lay upon his right side with his face near the edge of the bed, his eyes closed and his countenance pale, and of a leaden hue.

His features were altered and of an almost death-like expression; the skin was bathed in perspiration. Every muscle of the trunk seemed to be brought into powerful action to perform the act of inspiration, which was protracted and sonorous, while that of expiration was short, easy, and unobstructed. The pulse was steady, full, and moderately frequent; respiration could still be heard posteriorly in the lower part of the chest, though feeble. This aggravated condition had existed about six hours; the patient had, however, been very delirious and unmanageable during the night, and had required restraint.

The evening previous, Dr. Swett had ascertained by the touch, the existence of a moderate degree of swelling of the epiglottis attended with hoarseness, but with only slight dyspnœa.

The patient had already been complaining of sore throat, hoarseness, cough, and slight fever for four or five days, and had previously been carousing for several days subsequent to his return from a voyage. A blister had been applied to the throat, and ten grains of calomel given, followed by black draught.

Patient's bed being placed so as to face a window, he was raised to a sitting posture, which caused him to expectorate a considerable quantity of yellow viscid matter, that afforded some alleviation of his symptoms. He had expectorated freely the same sort of secretion during the night. On inspection, the surface of the velum and fauces was found of a deep red

color, clean and free from swelling of the tonsils or other parts.

The uvula was ulcerated off about its middle, leaving an even square surface as if it had been excised. Externally about the larynx, the neck was full and swollen, and the surface still suppurating from the blister. With the finger, the epiglottis was distinctly felt to be thickened, swollen and pulpy, more especially the left half of its margin. The glosso-epiglottic frænum and pouches remained natural. No time was lost in scarifying the edges of the glottis and epiglottis with the curved knife, which was accomplished readily from the parts being in this case unusually easy of access.

The operation was repeated two or three times at short intervals, and followed by a small quantity of blood in the sputa. No remarkable degree of disturbance was occasioned by the operation, and patient expressed some relief. After waiting half an hour it was judged by Dr. Swett, as well as myself, most prudent, in view of the urgency of the dyspnœa and imminent danger attending it, not to rely exclusively upon the scarifications, but to give the patient the additional chance of tracheotomy, which was accordingly performed without delay.

Great difficulty was encountered from the depth of the trachea, augmented by the swelling of the superjacent parts, and from the resistance of the patient, as well as the copious venous hemorrhage.

On incising perpendicularly the three superior rings of the trachea, the air rushed in with great force. After introducing a large sized curved silver tube, breathing was soon established through the artificial passage, and with less spasmodic coughing and irritation than usual.

The happiest effects promptly followed. The patient, from being exceedingly turbulent and excited, became tranquil and submissive. The respiration grew calm, and required no effort, and the countenance resumed its natural expression. Patient slept quietly the remainder of the day. On the following day at noon patient was doing well; and notwithstanding the tube was very much clogged with viscid mucus, he breathed easily. The swelling of the epiglottis had decidedly diminished. After removing the tube to cleanse it, the sides of the wound were pressed together to close the opening in the trachea, when it was found that respiration through the larynx could be performed with considerable facility, showing clearly that the swelling of the glottis had already diminished very much. Replaced the tube as before.

Second day.—Progress favorable; the epiglottis is free from swelling, and of its natural dimensions.

After cleansing the tube and replacing it, the patient was able to breathe with natural facility through the larynx, with the tube closed at its external orifice, showing conclusively, inasmuch as the tube accurately filled up the opening in the trachea, that the swelling in the glottis had already disappeared.

Third day.—Left out the trachea tube altogether.

March 20th.—Air no longer passes through the opening in the trachea. The wound has filled up with granulations—the surface only remaining to cicatrize. No auxiliary treatment was employed in this case

April 1.—Patient was this day discharged, with the wound healed, and his voice restored.

The other three cases that occurred terminated fatally, and without scarifications being resorted to.

They, however, possessed peculiar interest, as furnishing illustrations of the anatomical characters of the disease, and, happening as two of them did, after the first trial of the new method of treatment, they served to strengthen confidence in its adaptation and practicability.

Plates III. and IV. are faithful representations of the diseased parts removed from two of these cases, and show that the œdematous swelling affected both edges of the glottis in one (Pl. III.), and only one edge in the other specimen (Pl. IV.)

In the third case, not represented, the swelling also occupied only one edge of the glottis, and in all three cases the swelling descended to the vocal chords, and encroached very much on the cavity of the larynx.

In one of the three cases (Pl. III.) the epiglottis is represented as free from swelling, though doubt existed on this point from the tongue having been cut across at its base, and twenty-four hours having elapsed after its removal before the specimen came into my possession, thus allowing the effused fluid, which constitutes the swelling, to ooze out, had it existed.

In the other two cases, the epiglottis participated largely in the œdema.

The results obtained under the new treatment in the foregoing cases far exceeded my most sanguine expectations. In every instance a favorable result followed the use of scarifications. In cases II. and IV. no other efficient auxiliary treatment was employed; scarifications alone were relied upon; and, though in cases I. and III. venesection, leeches, emetics,

mercury, &c., were also employed, it was very obvious that no benefit was derived from them, and that no relief was experienced till the operation was resorted to.

It is true that in case V. tracheotomy, which has proved efficacious in this disease when early performed, was resorted to on account of the imminent danger of suffocation that threatened the patient; yet, if the particulars of this case are carefully considered, evidence may be derived from it tending to strengthen our confidence in the efficacy of scarifications, if not to show, that even in this particular instance, they might have been exclusively relied upon. It will be borne in mind, that twenty-four hours after the operation of tracheotomy, on closing the opening of the trachea, by compressing the edges of the wound together, the patient could already breathe through the larynx with a good degree of facility, and the epiglottis itself was felt to have diminished in size. At the expiration of forty-eight hours, on closing the outer orifice of the tube, which accurately filled up the opening in the trachea, the patient was able to breathe without effort, showing conclusively that the obstruction of the larynx had disappeared. The epiglottis had also resumed its natural size.

That the removal of the obstruction of the larynx in this case was very rapid will appear by comparing it with what has been observed in other analogous cases after tracheotomy.

Mr. Porter (*Obs. on the Surg. Path. of the Larynx and Trachea*, London, 1837, p. 103.) states, that in a very urgent case of œdema of the glottis, where tracheotomy was performed, "the subsequent progress was, in every respect, as favorable as the operator could wish. The patient had calomel and opium to the extent of affecting his mouth. *In a few days* he was able to respire partially through the glottis," &c. Mr. Porter also says (in *Med. Chir. Trans.*, vol. ix. p. 422.) of a patient, "*on the third day* after tracheotomy had been performed, under the most urgent circumstances in this disease, that he had one or two attacks of convulsive breathing from the wound being obstructed. He was sometimes obliged to resort to the natural opening, and to use strong muscular exertions in inspiration." &c. &c. This patient was also taking mercury freely. Mr. Lawrence (in the *Med. Chir. Trans.*, vol. vi. p. 253.) says of his patient, "on the *ninth day* after tracheotomy, he was sufficiently recovered to get up. By holding of the edges of the wound together he could breathe through the larynx and speak, but there was still a feeling of difficulty which made it necessary to open the wound again in a short time."

Mr. Wood (in *Med. Chir. Trans.*, vol. xvii. p. 159,) says of a patient, "on the *fourth day* after tracheotomy, she breathes easily except when the artificial opening is obstructed by mucus." Ptyalism was also produced in this case.

All of these cases recovered. The obstruction of the larynx, however, was slow and gradual in its disappearance, and, in three of them, the progress of absorption was aided by the mercurial action.

It may, therefore, I think, be fairly inferred that the rapid removal of the obstruction in the case under consideration is to be attributed to the free scarifications that had preceded the operation of tracheotomy, and in all probability they alone might have been relied on to accomplish the desired object. The mechanical obstruction to the entrance of air into the larynx, produced by the œdematous swelling of one or both edges of the glottis, with the spasm induced by it, constitutes the essential and dangerous feature of this disease, and one which will admit of no delay in its removal.

In the almost constant failure of other means to accomplish this object, the operation of tracheotomy has been very properly recommended by the best medical authorities to be early resorted to.

By this means an artificial entrance is provided for air into the lungs, by which life is supported, and time gained for the gradual removal of the obstruction.

The operation now under consideration aims at the removal of the obstruction itself in the most direct manner, and the results already obtained may well encourage the hope that this formidable disease will not hereafter bear such fatal sway as the annals of medical science show it to have done heretofore.

In respect to the difficulties of the operation, it may be remarked that those which exist on the side of the patient are—1st. Irritation and disturbance of the affected parts themselves produced by the presence of the finger and instrument. These, as has already been incidentally remarked in the report of the cases, have not been so great as to prevent the accomplishment of the operation or deter from its repetition. The patient soon recovers from them, and in every instance two or three repetitions, at intervals of three or four minutes, have been submitted to. In one instance only (Case III.) did the patient require urging. 2d. As this disease sometimes supervenes in the progress of phlegmonous inflammation affecting the parotid or submaxillary regions, and attended with rigidity of the lower jaw, the difficulty of separating the jaw might

be insurmountable. In this case tracheotomy would be the only resource. The most suitable means of overcoming the obstacle in such a case, would be the cautious use of wooden wedges to pry apart the jaws.

The difficulties on the part of the operator, where the requisite knowledge of the anatomical relations of the parts and the necessary skill are possessed, are by no means formidable. The accompanying plate (Plate I.), together with the description already given of the operation, it is believed will render the subject sufficiently plain.

The dangers of the operation are either of producing suffocation by exciting spasm, or of inflicting injury with the knife on neighboring parts. In regard to the first, more extensive experience alone can decide the question. In Cases III. and IV. it was submitted to a severe test; at all events the danger from this source can scarcely be equal to that of the disease itself.

In regard to the danger of wounding neighboring parts, the action of the knife is limited on either side by the sides of the thyroid cartilage, which shut in the glottis and render access to the great vessels impracticable. In the swollen state of the lining membrane, the scarifications, unless carried to an undue extent, would not be likely to involve anything beyond the membrane itself.

It will be for future experience to determine in what particular conditions of this disease the operation may be inapplicable. The advantages of its early application are shown in Cases I. and II.; and in Case III. the patient's obstinate refusal to submit to tracheotomy compelled our sole reliance on scarifications, and that in circumstances of the most imminent danger from impending suffocation.

Although œdema of the glottis is a disease confined to adult age, yet an analogous condition of the larynx is accidentally produced in children by their attempting to drink scalding water from the spout of a tea kettle. Numerous cases of this accident have been reported, in which death took place from suffocation, with symptoms of croup, and in which the edges of the glottis and epiglottis were found swollen and blistered. A few of these cases have been saved by tracheotomy. Scarifications would seem to be equally applicable for their relief, and Dr. Marshall Hall, in 1821, (*Med. Chir. Trans.*, vol. xii.,) after relating four cases of this accident, observes, in remarking on the treatment:—"If the suffocation were imminent, I should not hesitate to propose laryngotomy or tracheotomy, and the former would appear to reach below the seat of the

affection. But I now regret that I did not propose the scarification of the epiglottis and glottis, so as to evacuate the blisters." The suggestion of this distinguished physician does not appear to have been carried into effect or even noticed by those who have treated of this subject since it was made. Dr. Jameson, in his Observations on Œdema of the Glottis from attempts to swallow boiling water, (*Dub. Quart. Journ. of Med. Sci.*. No. IX., Feb. 1848,) makes no allusion to it.

Lisfranc has proposed making punctures (mouchetures) of the swellings in œdema of the glottis, of which Cruveilhier says, (*Dict. de Méd. et de Chir. Pratique*, tome ii. p. 41, 1834,) "I doubt whether this little operation has ever been performed." Mr. Ryland (*A Treatise on the Diseases and Injuries of the Larynx and Trachea*, Philadelphia, 1838, p. 51,) says of this method, and of that of M. Thuillier, which consists in making pressure from time to time by means of the finger upon the distended lips of the glottis, to promote the absorption of the effused serum, "both plans are fantastic, very difficult if not impossible of accomplishment, and more likely to increase than diminish the existing mischief."

Mr. Busk, at a meeting of the Royal Med. and Chir. Soc., March 9, 1847, (*London Lancet*, March, 1847,) related "two cases treated successfully by making a great number of minute punctures on the back of the tongue, the uvula, and pharynx, with a sharp pointed bistoury, and repeating them every half hour for two or three hours."

These are the only methods of treatment analogous to the one under consideration that have been hitherto proposed by others so far as my researches have ascertained.

The question of diagnosis in this disease is one of vital importance, irrespective of the present operation, but in connection with it its importance becomes very greatly enhanced. Without stopping to notice the distinctive symptoms which have been generally regarded as characteristic of this disease, or those of other diseases that are most likely to be mistaken for it, I beg leave to insist upon one sign which is strictly pathognomonic, and does not appear to have been sufficiently appreciated.

I refer to the swelling of the epiglottis as ascertained by the touch. The discovery of it, according to Bayle, (*Dict. des Scien. Med.*, tome xviii., p. 507,) is due to M. Thuillier, who proposed it in a thesis sustained before the Faculty of Medicine in Paris, in 1815. The value of this sign will be admitted if we consider how frequent the swelling of the epiglottis co-exists with that of the glottis. Bayle, (*loc. cit.*,) who dis-

sected more than seventeen cases of this disease, says, "the epiglottis is rarely intact, often is very much swollen at its edges." Ryland says, (*loc. cit.*, p. 48,) "The œdema is seldom confined to these localities, but extends to the base and lateral edges of the epiglottis," &c.

Among seventeen cases collected from different sources, and in which the condition of the epiglottis was ascertained, either by dissection after death, or by the touch or inspection during life, swelling was found in fifteen. Of the eight cases reported in this paper, the epiglottis was found swollen in seven, and in the remaining one there was no evidence that it was not swollen.

This swelling takes place either at the margin on one or both sides of the median line, or on the lingual surface of the epiglottis at its base, filling up one or both depressions between it and the tongue, and obliterating the central glosso-epiglottic frænum.

It conveys to the touch the sensation of a soft pulpy body, easily recognized and distinguished from the stiff rigid swelling of these parts in membranous laryngitis.

The facility of ascertaining the condition of the epiglottis with the end of the fore-finger, not only by placing it in contact with its anterior surface, but by passing over its upper edge and applying it upon its posterior surface, has been already noticed.

To test this question still further, the experiment has been repeated in at least twelve individuals, and in all with success, though not with equal facility. In some these parts were easier of access than in others, but in none did the experiment fail.

In the exceptional cases where the epiglottis is not found swollen, the edges of the glottis may be brought more within reach by pressing up the os hyoides with one hand applied externally over it, and acting from below upward, while the fore-finger of the other hand is introduced as directed into the mouth.

Should this not accomplish the object, the fore and middle finger may be thrust far back into the pharynx, as is required for the removal of a foreign body lodged in the throat.

In all the five cases treated by scarifications, it will be remembered that the test of touch was applied, not only by myself, but by one or more of my colleagues or assistants, and thus the diagnosis of the disease was established beyond doubt.

To those who have encountered this formidable disease, this

subject will possess peculiar interest; and the remedy proposed, perhaps, may be hailed by them as a valuable improvement in the healing art.

Time and experience alone can determine this question. To this test I desire to subject it after having, as I believe, faithfully recorded and made known the results of my own experience.

In conclusion, I desire to express my grateful acknowledgements to Drs. R. K. Hoffman and John A. Swett, my highly esteemed colleagues at the New York Hospital, for the opportunities they kindly afforded me of applying the new treatment upon their patients, and also to my pupil Mr. Moreau Morris, for the accurate and beautiful drawings accompanying this paper, and so indispensable for its illustration.—*Transactions of the American Medical Association.*

Origin of the Venereal Disease. By M. Ricord.—A question which has often been debated, and which is by no means solved, is the inquiry about the origin of the disease. No light has hitherto been thrown on the subject; and it may safely be asserted that the immense labors of Astruc, Sanches. Gittner, and many others, have had no satisfactory results. When we view the venereal disease as it now reigns, when we take into account the circumstances which surrounded the ancients. we must come to the conclusion that the disease has at all times existed. We find in the Scriptures descriptions of complaints which might very well be referred to blennorrhagia. Truly syphilitic affections, however, are not mentioned in them; but then, what are we to think of the lepra?

Hippocrates speaks of an ulceration of the genital organs; Galen mentions the contagious nature of blennorrhagia; and Celsus gives a description of the different affections of the parts of generation. It must be confessed that the latter speaks neither of their causes nor diagnosis, but he overlooks these matters also in the description of other diseases. The Greeks. the Arabs (Avicenna, Aretæus, Albucasis.) the physicians of Rome, have one and all given descriptions which cannot be mistaken. William de Salicet and Gordon give detailed accounts of ulceration of the genitals, and they attribute them to intercourse with women neglectful of clean'iness. and who abound in sanies (1467). Proceeding chronologically, we reach the famous epidemic of 1493–4. This was really a revolution of the disease, not only with reference to

the study of the same, but with regard to the ravages it made at that period. The constitutional manifestations caused the local affection to be overlooked; all the mischief was attributed to the former and they alone fixed the attention. At that time, then, the disease was looked upon as an inseparable whole. But these hasty views soon gave place to a calmer consideration of the subject, and the links which had been made to connect the heterogeneous parts of these affections, were broken asunder.

Alexander Benedict gave his contemporaries a glimpse into the origin of the syphilitic poison. Furnel studied its source, and the different accidents which may follow it. At last, John Hunter came, and laid the true foundation of the science of venereal affections. From Hunter's time until 1811–12–13 no advance was made. At this time arose a violent opposition to the then existing doctrines, and it threateded to overthrow all that had been taught since 1493. According to the supporters of the new theory, specificity was an illusion: irritation and inflammation were to account for everything. These battles, however, soon vanished; the spirit of observation triumphed, and venereal diseases resumed their proper bearing. All varieties were placed under the same category, and from that time improvements went on steadily.

In order to appreciate the value of history, it must be remembered that the ancients, up to the famous epidemic, were acquainted with local symptoms. The only mistake they were making was, that among these local symptoms they did not distinguish the specific from the non-spesific. But it has been asked, how did it happen that these ancients, being familiar with local appearances, did not hit upon the connexion existing between these and constitutional symptoms, or, in other words, the connexion between the cause and effect? I answer to this, that they likewise overlooked the relation of simple wounds of the genital organs with the appearances arising from them in neighboring parts, viz. the relation between epididimytis, blennorrhagia, or bubo, and a simple wound of the penis. Besides, it is very possible that the secondary symptoms, which we now regularly observe within a stated period, might have been much more tardy with them, so as to make the connexion pass unnoticed. Is not this very connexion forgotten in our own days, by men who daily come into contact with this disease? I may ask, moreover, whether it is proved that syphilis alone was concerned in the epidemic of 1493? Could not glanders, farcy, typhus, &c. have had something to do with it? Did not the famine and misery

caused by the wars of Charles V., the expulsion of the monks from spain—did not all the disasters of those times contribute to the outbreak of that fearful epidemic.

When people come to be at a loss as to the origin of syphilis, they thought of ascribing it to unnatural connexion, to the influence of the stars, the heavenly wrath, the air, the water, even to anthropophagy, &c. &c.; but is it not more natural to believe that the epidemic spread under the agency of a cause which had rendered the human body more accessible to the general infection? Do we not every day see patients who, having become locally affected, surrounded by certain circumstances, affected in the same way as before, exhibit secondary accidents?

After this epidemic, the venereal disease became again what it had been before, now that the epidemical tendency was disappearing.

It is the fifteenth century, too, that the American fable was invented. Sailors were said to have imported the disease from St. Domingo into Italy. Here we must notice that the faculty of inoculation must have been preserved during so long a voyage, and I do not think this at all probable. Besides, how can we imagine that a few men could, at the same time, have infected so many nations? Other circumstances were evidently necessary; and I do not hesitate to consider this as a mere story. But even if we were to admit that we are indebted to the Americans for the venereal disease, we should thereby only remove the limits of our inquiry still further. Could not the Americans ask us, or ask themselves, where they had it from. is quite certain that the disease is not more innate in that country than in any other; and as for the elevated temperature which has been looked upon as one of the causes of the development of syphilis in America, it may be objected that the temperature of some parts of the eastern hemisphere is just as high. We all know that the Arabs successfully used mercury in skin diseases, and that, now-a-days, we cure with this metal only those cutaneous affections which have a syphilitic origin. Could we not hence infer that these diseases had a syphilitic nature?

This sad complaint has arisen wheresoever sexual intercourse took place; and Voltaire was quite right when he said, "It is with syphilis as with the fine arts, it grows, comes to perfection, and no one knows whence it came.—*Lectures delivered at the Hôpital du Midi.—Ranking's Abstract.*

British Provincial Medical and Surgical Association.—Professor Wood, of Philadelphia, attended the meeting of this Association at Bath, in August last, in behalf of the American Medical Association, and, on being toasted, delivered the following address:

"Mr. Chairman and Gentlemen: It is with emotions, that, I fear, may prevent the expression of all I feel on this occasion, that I rise to thank the present company for the honor they have done me, and more especially for the honor they have done my country through me. (*Cheers.*) Science, sir, is universal—it is born of the necessities of our nature, and its objects are to promote the good of mankind; and therefore, its cultivators in every clime ought to be brethren. (*Hear, hear.*) If it be true of the great system of science, that by strong attraction, all parts are kept together, it is still more so in its inferior or subordinate relations. Like the planets of the solar system, though constituting a great mass of the stupendous whole, there is a closer affinity to each other than to other parts; so we, as scientific men, have a connexion, but as medical men, we are bound together by a yet stronger link. We, of America, have the same origin with you, which binds us by a yet closer tie. We have the same climate, the same literature, for we draw all our knowledge, (our scientific knowledge I mean,) from almost the same sources; and therefore, how important it is that we should cultivate the spirit of brotherhood. (*Hear, hear.*) Standing here as the representative of the profession in America, I may say also, as the representative of the intelligence of America, in relation to this country, for I believe, I may add, that in our land among the well-informed, there is a universal prevalence of this feeling towards the mother country. I say, sir, that we are extremely anxious to cultivate this reciprocal spirit from those in the highest ranks of knowledge to the lowest grades of society. (*Cheers.*) We have, gentlemen the fairest race on earth. We have also the impulse of the Welsh or Celts, the steadiness of the Saxon or German character, and the energy of the Norman race; and we shall go on, unless interrupted by ambition, until all parts of the earth are impregnated with the Saxon knowledge and the Saxon religion, and to such an end I am bound to wish a speedy consummation. (*Cheers.*)"—*New York Journal of Medicine.*

THE WESTERN JOURNAL.

THIRD SERIES.—VOL. II.—NO. VI.

LOUISVILLE, DECEMBER 1, 1848.

OUR PROSPECTS.

We hasten to announce to our readers that their response, so promptly given to our appeal in the last number of the Journal, has decided the publishers to continue the work. To those subscribers who have come forward with so much alacrity, we cannot do less than tender our unfeigned thanks, and at the same time we indulge a firm belief, that others too remote to have returned their answer will be found, in due season, to have emulated the worthy example of their brethren. Our Journal, therefore, is safe for the present; but whether it is to go on increasing in strength and usefulness, from year to year, or finally to dwindle and perish as so many similar publications in our country have done, is a question to be determined by those who take an interest in the enterprise. It cannot be sustained without punctuality on the part of its subscribers, nor can it be rendered worthy of a liberal support without contributions from the pens of our practising physicians. Medicine is becoming every day more and more a science of rigid observation and induction, and what the readers of a Journal want are, not speculations, but facts —cases carefully observed and accurately recorded—histories of endemics and epidemics, in all the circumstances of their rise, progress, medical treatment, and lesions presented after death—original observations, made in medicine, or any of the collateral sciences. For these a journal must

rely upon working men, and we are happy to say that the number of such who are pledged to our support is greater than it has ever been at any time since our work was commenced.

It is with encouragement, then, though it is not witout some feelings of distrust, that we are looking forward to a new year of editorial responsibility, toil and care. There are prospects which cheer us on to our onerous duties, but a somewhat extended experience admonishes us not to expect or promise too much. Louisville, we think, ought to have a journal of medicine; with its large and increasing medical corps, its hospital, its easy intercourse with our great cities and the chief cities of Europe, it surely can, and we are sure that it will, sustain one. If ours, hitherto, has not been all that we could wished it to be, there is no reason why it may not be brought up to a point of excellence which shall command a wide and enduring patronage. It is our wish to unite upon it all the professional talent of the great region of country which it represents, and we earnestly solicit contributions from all our brethren, many of whom are already known to fame, and more require only time and opportunity to make themselves as honorably known.

CONVENTION OF WESTERN MEDICAL SCHOOLS.

Under this head, in another department of the Journal, will be found a call for a convention of medical teachers in the west, to which we wish to invite special attention. We agree with the editor of the Ohio Medical and Surgical Journal, who has renewed the proposition more than once before made, that it is high time for the medical schools on the Lakes and in the valley of the Mississippi to adopt something like a uniform system, and that by no step are they so likely to come to an understanding as by a convention of their members. We earnestly hope, therefore, that the motion of the Starling Medical College will be seconded by all the Western schools, and that we shall see a full meeting at the time and place designated. We pledge the hearty co-operation of the Medical Faculty of the University of Louisville, who have long desired to see such a convention. We trust that no petty jealousies will interfere to frustrate the design, but that all the schools will send delegates and unite harmoniously in an effort to advance the interests of our common profession. Perfect uniformity among the schools in respect to fees may not be attainable, but there is no reason why they should not agree upon

the length of the lecture-term, the preliminary and professional qualifications for a degree, and many other points of vital interest to medical education in the country.

LETTERS FROM EUROPE.

As the Letters of our Foreign Correspondent, *David W. Yandell*, M. D., were passing through the press, the publishers had a few extra copies of each letter printed for the author, and these have been bound into a neat volume of 500 pages for distribution among his friends. A copy of the work has been laid on our table. In looking through it we have been struck with the immense variety of important medical topics to which the correspondence refers, and we think no one would examine it without conceiving an opinion favorable to the persevering industry of the author. We need not speak of the merits of the correspondence; our readers have had the means of forming their own judgment respecting it. The author has come and entered upon the practice and teaching of his profession in this city, and we trust will continue to be a regular contributor to our pages. In the course of the next year, he has promised to furnish us with translations of the Lectures of Ricord on the *venereal disease*, and those of Breschet on *typhoid fever*. He will also translate for us the most interesting medical intelligence contained in the current medical Journals of Paris.

CHLOROFORM IN CHOLERA.

The London Times, of October 25th, contains a letter from James Hill, M.D., Resident Surgeon of the Peckham House Asylum, giving a most favorable account of his success with chloroform in the treament of cholera. In ten cases treated with it, the result was favorable, though the disease in each was considerably advanced. In two cases, it was unsuccessful, but in both, the patients were sinking before the remedy was thought of. Reaction under its influence is stated, in some instances, to be so great as to require subsequent blood-letting. The cramps and vomiting were promptly allayed. In some cases it was found necessary to keep up the action, at intervals, for 24 hours. The medical Journals of London and Paris may be expected soon to furnish us with something on this interesting subject.

EDITORIAL CHANGES.

Drs. Fenner & Carpenter have retired from the New Orleans Medical and Surgical Journal, leaving Drs. Harrison and Hcster the remaining editors. Dr. W. C. Roberts has retired from the editoral management of the Annalist, and is succeeded by Dr. N. S. Davis. The Missouri Medical and Surgical Journal has been merged in the St. Louis Medical and Surgical Journal, and Drs. M'Dowell and Moore, the editors of the former, are joint-editors of the latter with Drs. Linton and M'Pheeters. The number for November and December has just reached us and presents a neat appearance. The union of professors of two rival schools in such an enterprise is rather a novel spectacle, and exhibits our profession in an amiable light. We trust the harmony which the union denotes may not be disturbed, and that the St. Louis Medical and Surgical Journal has before it a long career of usefulness and prosperity.

CORRECTIONS,

In our notice of Druitt's Surgery, in our last number, we stated that the notes of the former editor had been suppressed. On a more careful examination of the work we perceive that our statement was incorrect. The notes have been incorporated by the authorin the text. We hasten to make this correction.

In Dr. Sutton's paper on Smallpox, the reader will please make the following corrections: At page 103, line 23, after "those" insert "who." On same page, instead of "it with varioloid," read varioloid with chickenpox. On page 106, line 18, for "purpuraceous," read "furfuraceous;" and on page 109, line 6, after "small" insert "pox."

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